State Board Meeting

Clark College • 1933 Fort Vancouver Way • Vancouver, WA 98663
Gaiser Hall • Room 213, Ellis Dunn Community Room

Study Session: Wednesday, May 6, 2015
10 a.m. to 5:15 p.m.

Business Meeting: Thursday, May 7, 2015
8 a.m. to 12:30 p.m.

Shaunta Hyde, chair pro tempore
Jim Bricker • Elizabeth Chen • Anne Fennessey • Wayne Martin
Larry Brown • Jay Reich • Carol Landa-McVicker • Phyllis Gutierrez-Kenney
Marty Brown, executive director • Beth Gordon, executive assistant
Statutory Authority: Laws of 1967, Chapter 28B.50 Revised Code of Washington

May 6

Study session agenda

10 a.m. Call to order and welcome
Shaunta Hyde, chair pro tempore

10:10 a.m. Applied baccalaureate degree statements of need
Discuss Tab 1
Joyce Hammer
a. Bellevue College – Health Promotion and Management
b. Bellevue College – Healthcare Management and Leadership
d. Bellingham Technical College – Engineering Technology
e. Centralia College and Grays Harbor College (joint) – Teacher Education: Elementary Education and Special Education
f. Centralia College – Information Technology: Application Development
g. Clark College – Applied Management
h. North Seattle College – Early Childhood Education

11:45 a.m. Lunch

12:30 p.m. ctcLink update
Discuss
Wayne Martin and Mike Scroggins

12:45 p.m. Limited Legal License Technician program update
Discuss Tab 2
Marie Bruin

2 p.m. Break

2:15 p.m. An innovative high school/college partnership: College readiness transition courses in Washington
Discuss Tab 3
Bill Moore

3:45 p.m. Student voice - DREAMer student training
Discuss Tab 4
Edward Esparza

4:30 p.m. Bates Technical College update
Discuss

5:15 p.m. Adjournment

6 p.m. Dinner meeting – Heathman Lodge
May 7  Regular business meeting agenda

7:30 a.m.  Breakfast

8:00 a.m.  Call to order and adoption of agenda  Action
Shaunta Hyde, chair pro tempore

8:05 a.m.  Approval of consent agenda  Action  Tab 5
  a.  SBCTC meeting minutes, March 26, 2015
  b.  2015-16 SBCTC meeting dates and locations
  Resolution 15-05-11
  c.  Interagency agreement: college readiness transition courses project
  Resolution 15-05-12
  d.  Bellevue College, property acquisition, 2445 145th Place SE
  Resolution 15-05-13
  e.  Olympic College, property acquisition, 1306 13th Street
  Resolution 15-05-14
  f.  Wenatchee Valley College, local expenditure authority, energy savings
  project
  Resolution 15-05-15

8:10 a.m.  2016 allocation review  Tab 6
Nick Lutes

8:40 a.m.  Host college presentation
President Robert Knight

9:30 a.m.  ACT report
Greg Bever, TACTC president

9:40 a.m.  WACTC report
Ed Brewster, WACTC chair

9:50 a.m.  FACTC report
Phil Venditti, FACTC president

10 a.m.  Break

10:10 a.m.  Math acceleration and student success strategic plan  Tab 7
Resolution 15-05-16
Wayne Martin, Elizabeth Chen and Jan Yoshiwara

10:30 a.m.  Final consideration of applied baccalaureate degrees  Tab 8
Joyce Hammer
  a.  Grays Harbor College – Organizational Management
  Resolution 15-05-17
  b.  Green River and Grays Harbor colleges – Forest Resource Management:
  Sampling and Assessment (Green River) and Operations (Grays Harbor)
  Resolution 15-05-18
  c.  Green River College – Aeronautical Science
  Resolution15-05-19
  d.  Spokane Falls Community College – Applied Management
  Resolution 15-05-20
  e.  Tacoma Community College – Health Information Management
  Resolution 15-05-21
  f.  Whatcom Community College – Information Technology: Networking
  Resolution 15-05-22
EXECUTIVE SESSION: Under RCW 42.30.110, an Executive Session may be held. Action from the Executive Session may be taken, if necessary, as a result of items discussed in the Executive Session.

PLEASE NOTE: Times above are estimates only. The Board reserves the right to alter the order of the agenda. Reasonable accommodations will be made for persons with disabilities if requests are made at least seven days in advance. Efforts will be made to accommodate late requests. Please contact the Executive Director’s Office at (360) 704-4309.
Applied baccalaureate degree statements of need

Brief description
A conceptual discussion will occur among the State Board for Community and Technical Colleges along with the several community and technical colleges proposing to offer a Bachelor of Applied Science (BAS) degree program.

The Statement of Need document addresses six areas:

- relationship to institutional role, mission and program priorities
- support of the statewide strategic plans
- employer/community demand for graduates with baccalaureate level of education proposed in the program
- applied baccalaureate program builds from existing professional and technical degree program offered by the institution
- student demand for program within service area
- efforts to maximize state resources to serve place-bound students

How does this link to the System Direction, Mission Study and Policy Focus

In the System Direction report, the State Board for Community and Technical Colleges expresses intent on building strong communities while supporting the growth of individuals and families to achieve global competiveness, creating lasting prosperity for Washington state and its economy.

Colleges that offer applied baccalaureate programs are focused on three core areas in developing their Statement of Needs: Economic Demand, Student Success and Innovation. Colleges meet the needs of changing economies by increasing the number of skilled employees in the areas of greatest need. Through this, colleges create greater access to higher education by enrolling underserved populations and ensure community and technical colleges are affordable and accessible for students. Applied baccalaureate degrees expand the pipeline from associate degrees to bachelor’s degrees in critical areas in demand by employers and students. As part of the development of emerging programs, colleges with applied baccalaureate programs have addressed innovation by forming programs that are technology and globally focused.

To date, the State Board has approved 45 bachelor’s of applied science degree programs at 20 colleges to be implemented by 2015-2016. Seventeen proposals are engaged in the approval process, and colleges have expressed interest in 19 additional programs. (Attachment A: Applied baccalaureate degree programs)

Background information and analysis

1a) Bellevue College – BAS Health Promotion and Management
Bellevue College proposes a Bachelor of Applied Science degree in Health Promotion and Management beginning fall 2016. This degree will meet the high demand for baccalaureate-educated health promotion coordinators, health fitness managers, worksite health directors, health educators, community health specialists, health promotion work-life specialists, on-site employee health coaches, wellness consultants and related careers. The degree will prepare graduates to understand program development and management, behavior modification, research methods and health advocacy in a wide range of
health promotion positions. The proposed baccalaureate degree will build on Bellevue’s current
Associate in Applied Science-Transfer degree in Business Management and Allied Health. Bellevue
currently offers eight approved applied baccalaureate degree programs.

1b) Bellevue College – BAS Healthcare Management and Leadership
Bellevue College proposes a Bachelor of Applied Science degree in Healthcare Management &
Leadership beginning fall 2016. This degree will be built by extracting management concentrations from
existing BAS Healthcare Technology & Management and BAS Radiation and Imaging Sciences degree
programs, to create a stand-alone Healthcare Management and Leadership degree. The decision to
combine the management concentrations from these two degrees into one will clarify pathways for
students and employers while meeting the needs of local workforce demands, ultimately improving
marketability and degree recognition. This degree will teach students the essentials of leadership and
provide an overview of the business functions of healthcare. Graduates will be well suited to become
effective managers and administrators in hospitals, clinics and healthcare centers.

1c) Bellingham Technical College – BAS Operations Management
Bellingham Technical College proposes a Bachelor of Applied Science degree in Operations
Management beginning fall 2016 in order to respond to regional and state need within advanced
manufacturing industries. This degree will create a pathway for current employees and two-year
associate degree graduates to learn management skills and enhance their career opportunities. The
Operations Management program will build on the college’s Associate of Applied Science – Transfer
(AAS-T) programs including Electro Mechanical Technology (Mechatronics), Process Technology and
Computer Networking. Having those programs in place provides curricular infrastructure to build
courses in system design, quality assurance, logistical planning, lean concepts and management
information systems. Graduates will be able to fill production and IT management positions within the
manufacturing sector. If approved, this would be Bellingham Technical College’s first applied
baccalaureate degree.

1d) Bellingham Technical College – BAS Engineering Technology
Bellingham Technical College proposes a Bachelor of Applied Science degree in Engineering
Technology beginning fall 2016. While other regional four-year educational institutions offer
engineering degrees, Bellingham Technical College’s degree in Engineering Technology will be the
only program on the west side of the state. This program will combine theoretical content with a heavy
emphasis on practical application, providing current students and engineering technicians with the
opportunity to complete baccalaureate degrees and advance their careers. The degree in Engineering
Technology will build on Associate in Applied Science- Transfer degrees including Civil Engineering
Technology, Mechanical Engineering Technology and Electronics Engineering Technology. Economic
rebound and rapid growth statewide in aerospace and manufacturing fields are driving a demand for
qualified engineering technologists and an increase in retirement rates among senior engineers further
supports an unmet need for bachelor-level graduates.

1e) Centralia College and Grays Harbor College (joint) – BAS Teacher Education: Elementary
Education and Special Education
Centralia College and Grays Harbor College propose a joint Bachelor of Applied Science in Teacher
Education with endorsements in Elementary Education and Special Education beginning fall 2016. The
degree will build off Paraprofessional (Centralia), Early Childhood Education (Centralia) and Education
(Centralia, Grays Harbor) associate degrees. The joint degree will provide a pathway for place bound
students to pursue teaching certification in the high-demand field of special education and also allow for additional credentialing opportunities for existing certified teachers. This degree will enable current paraprofessionals to advance within their school districts. Centralia College currently offers two applied baccalaureate degree programs.

1f) Centralia College – BAS Information Technology: Application Development
Centralia College proposes a Bachelor of Applied Science Degree in IT: Application Development beginning fall 2016. The proposed degree will help address employer demand for software developers and computer programmers nationally, in the State of Washington and within the Pacific Mountain Lewis County workforce area. This degree will meet the growing demand for employees with advanced skills in programming languages and provide opportunity for high-wage careers in Information Technology.

1g) Clark College – BAS Applied Management
Clark College proposes a Bachelor of Applied Science in Applied Management degree to build on its two-year Career and Technical Education degree. Currently an Associate of Applied Science in Accounting, Administrative Assistant, Early Childhood Education and marketing are offered. Demand for students graduating with the degree in applied management targets occupations in a broad spectrum of industries with titles such as human resource manager, construction manager and administrative manager. Clark College currently offers one applied baccalaureate degree program.

1h) North Seattle College – BAS Early Childhood Education
North Seattle College proposes a Bachelor of Applied Science degree in Early Childhood Education as a pathway to employment as a lead teacher or director in a preschool or early learning classroom. Federal, state and local policy changes (including the recently passed Seattle Proposition 1-B) designed to professionalize the occupation are increasing demand for baccalaureate-trained preschool teachers. The degree in Early Childhood Education will build on North Seattle College’s existing Associate in Applied Science –Transfer degree in Early Childhood Education (ECE) and will also be a pathway for other ECE associate degree programs in the Puget Sound region. North Seattle College currently offers two applied baccalaureate degree programs.

Potential questions
- Do the college proposals for a bachelor of applied science meet the vision, mission and goals of their respective colleges?
- Do the proposed bachelor of applied science degree programs serve the current and future needs of the colleges’ regions and the state?
- Do the proposed bachelor of applied science degree programs support the State Board for Community and Technical College System Direction goals and Mission Study action plans for sustaining economic prosperity into the future?

Recommendation/preferred result
Staff will provide a brief overview of applied baccalaureate degree proposals. Board members will have an opportunity to discuss the applied baccalaureate proposals with college representatives in the context of meeting college and system goals.

Policy Manual change Yes ☐ No ☒
## Washington’s Community and Technical Colleges
### Applied baccalaureate degree programs

May 2015

### Applied Baccalaureate Degree Status - May 2015

<table>
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<th>College</th>
<th>Degree</th>
<th>Status</th>
<th>Outcomes thru 2014</th>
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<tr>
<td><strong>Total</strong></td>
<td></td>
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<td>832 graduates</td>
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Program Information

Institution Name: Bellevue College
Degree Name: BAS: Health Promotion and Management CIP Code: 51.0001

Name(s) of existing technical associate degree(s) that will serve as the foundation for this program:

Degree: Business Management – AAS-T CIP Code: 52.0201 Year Began: 1995
Degree: Allied Health – AAS-T CIP Code: 51.0000 Year Began: 2013

Proposed Start Implementation Date: Fall 2016

Projected Enrollment (FTE) in Year One: 20 Full Enrollment by Year: 2017
Funding Source: State FTE: ☐ Self-Support: ☒ Other: ☐

Mode of Delivery

Single Campus Delivery: Bellevue College main campus
Off-site: N/A
Distance Learning: Majority of courses will be hybrid, some fully online.

Contact Information (Academic Department Representative)

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Email: ray.butler@bellevuecollege.edu
Introduction to the degree

Bellevue College proposes development of a bachelor of applied science (BAS) degree in Health Promotion and Management (HPM) to meet the high demand for baccalaureate-educated Health Promotion Coordinators, Health Fitness Managers, Worksite Health Directors, Health Educators, Community Health Specialists, Health Promotion Work-life Specialists, On-site Employee Health Coaches, Wellness Consultants, and related careers.\(^1\) These positions represent new and emerging trends in the Health Promotion and Management field, giving rise to an array of new career directions. The degree will prepare graduates to understand program development and management, behavior modification, research methods, and health advocacy, and work in a wide range of health promotion positions within private, government, and non-profit organizations.

By integrating these various knowledge bases, graduates gain a versatility and focus not typically found in Healthcare Management and Leadership programs or Public Health programs. Where Healthcare Management and Leadership programs aim to develop managers and administrators in hospitals, clinics and healthcare centers, and Public Health programs focus on emerging diseases, access to health care, modes of health care and the effects of the environment and geography on health and disease, this HPM degree program will prepare graduates to manage and administer the integration of wellness culture within a wide array of organizations with the purpose of reducing healthcare costs, improving productivity, enhancing employee safety and improving both employee well-being and work-life balance. To this end, students will gain:

- Foundational knowledge in health and wellness, including the physiologic and psychological basis for health, exercise science, nutrition, environmental health and integrative medicine.
- Ability to identify health promoting and health inhibiting behaviors and communicating information about them to individuals and large community
- A fluency with best practices in behavioral change, including lifestyle coaching
- An understanding of health research and research processes, including development of research instruments to analyze local community need
- Skills in assessing organizational culture, building consensus and implementing state, national and organizational wellness agendas
- Competency in designing, implementing, administering, marketing and evaluating effective health promotion programs in worksite, community, health care, and agency settings
- Knowledge about relevant ethical and legal practices to assess, reduce and manage risk within

organizations

- Skills with information systems that improve processes, quality of care and service outcomes

Hiring trends show a growing need for Health Educators and Community Health Workers with a bachelor’s degree.¹ Candidates for these jobs need to be proficient in assessing the needs of communities, developing programs and events to educate about health topics and teaching people how to cope with existing health conditions. Candidates must also be capable of evaluating the effectiveness of programs and educational materials, and advocating for increased resources and improved policies that promote health.

Since the majority of health-related openings now require a baccalaureate degree, career options are limited for graduates from two-year health-related programs. The applied baccalaureate degree in Health Promotion and Management will not only address the limitations for two year program graduates, but also it will bring together theory and practice to prepare graduates to work effectively in the increasingly integrated and technologically complex environment of the health promotion profession. The degree will be suitable for graduates of Bellevue College’s two-year technical degrees in Allied Health, Business, and Marketing, and for graduates from other colleges with equivalent preparation.

The following proposal demonstrates how the new applied baccalaureate degree in Health Promotion and Management supports the college’s mission and goals; addresses the goals of the state’s master plan for education; meets student and employer demand; addresses a skills gap, and offers general information on the new curriculum.

Relationship to institutional role, mission and program priorities

Bellevue College requires that every new program align to its mission, which states:

"Bellevue College is a student-centered, comprehensive and innovative college, committed to teaching excellence that advances the life-long educational development of its students while strengthening the economic, social and cultural life of its diverse community. The college promotes student success by providing high-quality, flexible, accessible educational programs and services; advancing pluralism, inclusion and global awareness; and acting as a catalyst and collaborator for a vibrant region. (Approved by Board of Trustees, June 11, 2008.)"

Developing baccalaureate degrees is a fully integrated component of Bellevue College’s strategic planning. “Applied Baccalaureate Development” is a president’s cabinet-level priority, with goals assessed annually. Baccalaureate degrees are developed through careful consideration of the college’s strengths and strategic enrollment goals. Also considered are workforce needs, community demand, and sustainability of each proposed degree. In addition to continuing education, certificates, professional/technical degrees and transfer degrees, baccalaureate degrees are a means through

¹ http://www.bls.gov/ooh/community-and-social-service/health-educators.htm#tab-2
which Bellevue College provides the level of education required by local employers and citizens. As the entry level criterion shifts from a two-year to a four-year degree in multiple fields, Bellevue College assesses the need for applied bachelor’s degrees to meet demand for highly skilled employees, and to ensure that our area residents will have access to the education needed for success in their chosen fields.

Bellevue College is committed to developing four-year degrees that build on the college’s existing areas of expertise and fulfill unmet local need. The BAS in Health Promotions and Management is a fitting addition to the college’s excellent two-year and four-year programs in healthcare related fields. The addition of the Health Promotion and Management degree will address the current unmet need for employees specifically planning to work in the emerging field of Health Promotion. In 2009, Bellevue College was granted accreditation by the Northwest Commission of Colleges and Universities (NWCCU) to offer baccalaureate degrees. The college currently offers six bachelor’s degrees. These degrees are: a BAS in Data Analytics, a BAS in Healthcare Technology and Management, a BAA in Interior Design, a BAS in Information Systems and Technology, a BS in Nursing, and a BAS in Radiation and Imaging Sciences. Baccalaureate degrees play an important role in Bellevue College’s commitment to provide high quality, flexible, accessible education programs and strengthen the economic life of its diverse community.

Support of statewide strategic plans

In proposing this BAS in Health Promotion and Management, Bellevue College reaffirms its support of the goals outlined in the State Board for Community and Technical College’s (SBCTC) Mission Study and the Washington Student Achievement Council’s Education Roadmap. Both plans identify strategies to increase the number of baccalaureate educated adults as a means to strengthen the economy and serve workforce needs for more highly educated “locally grown” workers that will:

- Strengthen state and local economies by meeting the demands for a well-educated and skilled workforce;
- Achieve increased educational attainment for all residents across the state;
- Use technology, collaboration and innovation to meet the demands of the economy and improve student success.

Employer and community demand

Bellevue’s unique position

Bellevue College is located within the Bellevue city limits on the central east side of Lake Washington. The land around Puget Sound is the most highly and densely populated area of Washington State, home to more than 50% of the state’s population. Five cities of over 100,000 exist within a 30 mile
Bellevue College’s location, surrounded by small and large companies, positions it well for a new applied bachelor’s degree in Health Promotion and Management. Not only will this new degree provide companies opportunities to employ newly trained health promotion professionals, but also it will expand options and pathways for community college students.

In 2009 the Bellevue College Health and Physical Education faculty, along with their advisory board, initiated exploration of local need for a BAS in Health Promotion and Management. Over the past six years, this exploration has been influenced by a series of external factors, including: the Affordable Care Act; Washington State’s Executive Order 13-06 requiring all state agencies with 50 or more employees to provide wellness programs; and alarming increases in health problems of U.S residents. This exploration was also inspired by First Lady Michelle Obama’s deep concern for the health of the nation. She remarked in a 2010 speech: “The physical and emotional health of an entire generation and the economic health and security of our nation is at stake.”

In response to these external factors, Bellevue College’s Health and Physical Education faculty and the Advisory Board concluded that developing a Health Promotion and Management degree, offering a comprehensive, lifelong, proactive approach to health was imperative. Employing such an approach, the HPM degree would prepare graduates for leadership roles in the development and maintenance of community and workplace health programs. Existing health and fitness degrees are often specialized and do not prepare professionals to address the crucial health issues of today. According to Doug Spoon, Washington State Department of Labor and Industry Wellness Coordinator, a Bachelor of Applied Science program that taught health trends, current research, outdoor education, exercise prescription, nutrition, and stress management would prepare graduates to develop and maintain more effective wellness programs.

**Labor market data**
The health and well-being of Washington state citizens is one of the most pressing concerns in our state. The state’s and the nation’s healthcare crisis imperils economic solvency and the quality of life for citizens. According to the Centers for Disease Control (CDC), bad habits (inactivity, poor eating,

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3 quickfacts.census.gov/qfd/states/53000.html 2013 estimates
See also Center for Disease Control and Prevention: [http://www.cdc.gov/obesity/data/facts.html](http://www.cdc.gov/obesity/data/facts.html).
6 Phone interview, January 2015, Ray Butler, phone conversation with Doug Spoon.
and smoking) caused more than one-third of the deaths in the U.S. in 2000. These behaviors were also the risk factors that underlay the development of leading chronic disease killers: heart disease, cancer, stroke and diabetes. These facts emphasize the need to encourage healthier behaviors and obtain regular health screenings. Bellevue College’s HPM program aims to train Health Promotion professionals to tackle and reverse these costly and largely preventable health concerns.

To capture current and projected demand for its new HPM degree program, Bellevue College mined several datasets. These datasets comprised:

- graduation data from health related programs at regional colleges and universities
- current job postings through indeed.com;
- an employer survey
- interviews with local employers
- An environmental scan of workplace health and wellness trends


Since Health Promotion Management is a new and emerging occupational field, it is not adequately reflected by the existing O*NET-SOC structure. However, it is possible to extrapolate the emerging need through tracking related occupations and occupations supervised by Health Promotion Managers. Bellevue college compiled an occupation report of related roles from EMSI, O*Net, the Bureau of Labor Statistics and the Washington State Employment Security Department. The report included Health Educators, Recreational Therapists, Exercise Physiologists, Athletic Trainers, Fitness Trainers and Aerobics Instructors, Substance Abuse and Behavioral Disorder Counselors, Rehabilitation Counselors and Occupational Health and Safety Technicians. Many of these occupations would be supervised by or work closely with a Health Promotion Manager. The report targeted King County to gauge employer demand for the broader field of health education and community health. This report returned a total of 7,753 jobs in 2014, with a projected growth of 17.7% by 2024, estimating the total number of jobs by that year at 9,127. The median wage for these professions is $19.33/hour. The median wage for a Health Promotion Manager would be higher, since many of these roles would report to the Health Promotion Manager. Of note, Health Educators, an occupation of prime relevance for the BAS HPM degree program showed the largest number of current job openings available in 2014 at 806 with a project growth of 23% and a median wage of 23.52/hour. Although Health Promotion Managers differ from Health Educators, a similar number of jobs, given the level of work, would be likely for Health Promotion Managers. All of the occupations included in the report require a Bachelor’s degree with the exception of Aerobics Instructor, where 20% of workers enter this field with a Bachelor’s degree.

Table I below breaks down these occupations, showing occupation title, occupation code, estimated jobs for 2012, projected jobs for 2024, percentage change between 2012 and 2022, short and long
term trends, average annual openings, average annual growth rate(2012-2024) and average annual salaries. This table draws its data from Economic Modeling Specialists International and the Washington State Employment Security Department.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Educators</td>
<td>21-1091</td>
<td>806</td>
<td>1052</td>
<td>23%</td>
<td>Growth</td>
<td>Growth</td>
<td>36</td>
<td>1.6%</td>
<td>$53,236</td>
</tr>
<tr>
<td>Recreational Therapists</td>
<td>29-1125</td>
<td>101</td>
<td>113</td>
<td>12%</td>
<td>Growth</td>
<td>Growth</td>
<td>4</td>
<td>1.5%</td>
<td>$55,310</td>
</tr>
<tr>
<td>Exercise Physiologists</td>
<td>29-1128</td>
<td>29</td>
<td>34</td>
<td>17%</td>
<td>Growth</td>
<td>Growth</td>
<td>Unavailable</td>
<td>Unavailable</td>
<td>Unavailable</td>
</tr>
<tr>
<td>Athletic Trainers</td>
<td>29-9091</td>
<td>141</td>
<td>176</td>
<td>24%</td>
<td>Growth</td>
<td>Growth</td>
<td>6</td>
<td>1.8%</td>
<td>$48,989</td>
</tr>
<tr>
<td>Fitness Trainers and Aerobics Instructors</td>
<td>39-9031</td>
<td>3,766</td>
<td>4,432</td>
<td>18%</td>
<td>Growth</td>
<td>Growth</td>
<td>125</td>
<td>1.7%</td>
<td>$42,533</td>
</tr>
<tr>
<td>Occupational Health and Safety Technicians</td>
<td>29-9012</td>
<td>53</td>
<td>67</td>
<td>26%</td>
<td>Growth</td>
<td>Growth</td>
<td>3</td>
<td>.8%</td>
<td>$53,747</td>
</tr>
<tr>
<td>Substance Abuse and Behavior Disorder Counselors</td>
<td>21-1011</td>
<td>858</td>
<td>1,052</td>
<td>23%</td>
<td>Growth</td>
<td>Growth</td>
<td>49</td>
<td>2.6%</td>
<td>$44,424</td>
</tr>
<tr>
<td>Rehabilitation Counselors</td>
<td>21-1015</td>
<td>2,090</td>
<td>2,411</td>
<td>15%</td>
<td>Growth</td>
<td>Growth</td>
<td>89</td>
<td>1.4%</td>
<td>$45,196</td>
</tr>
</tbody>
</table>

Supplementing this regional employer demand is the national job outlook for Health Educators and Community Health workers. Because Health Promotion Management is a new and emerging field, data on the national job outlook for this broader field is at this time more readily available. According to the Occupational Outlook Handbook of the Bureau of Labor Statistics, “employment of health educators and community health workers is projected to grow 21 percent from 2012 to 2022, faster than the average for all occupations.” This growth “will be driven by efforts to improve health outcomes and to reduce healthcare costs by teaching people about health habits and behaviors and utilization of available health care services.” Bellevue College’s HPM degree program is an intentional effort to anticipate and capitalize on this job outlook.7

Unmet employer demand/annual graduates from regional health related programs

Nine colleges and universities offer academic programs related to health, fitness, physical education and public health in King County. In 2013, these colleges and universities produced 312 program completions of which 118 or (37.8%) were bachelor degrees. In this same year, health related job openings totaled 1,411, indicating a sizable gap between annual completions and employer demand.

Because Western Washington University (WWU) is not located in King County, it does not appear in the King County report cited above. WWU is worth noting, however, because it offers a number of health related degree programs. One of these programs, the Bachelor of Science degree in community health has similarities to Bellevue College’s proposed HPM program. Like Bellevue College’s HPM program, the WWU community health degree requires study in biological and social sciences, health content, health methods and health education theory and practice. The WWU program does not, however, require course work in business, management or marketing. These latter courses are one of the ways in which Bellevue College distinguishes its approach to the field of Health Promotion and Management.

According to the Integrated Postsecondary Education Data System (IPEDS), WWU had 20 students complete the B.S. degree in Community Health in 2013. Adding these 20 completions to the 118 bachelor degree completions in King County brings the total bachelor degree to 138. While helpful, these additional degrees still leave a sizable gap between annual graduates and job openings.

Job postings through indeed.com

Employer demand as well as the supply gap data can also be seen in a momentary snap shot of employment on any given day.

On February 19, 2015, there were 348 jobs listed using Health Promotion, Wellness Coach, Wellness manager, Wellness Coordinator and Health Educator as search terms in the Seattle metropolitan area as reported by Indeed.com, an employment meta-search engine for job listings. These job opening were as follows:

<table>
<thead>
<tr>
<th>Job Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Health Promotion”</td>
<td>111</td>
</tr>
<tr>
<td>“Wellness Coach / Manager/ Coordinator”</td>
<td>99</td>
</tr>
<tr>
<td>“Health Educator”</td>
<td>148</td>
</tr>
<tr>
<td></td>
<td>348</td>
</tr>
</tbody>
</table>

Not only is this snap shot data an indication of the new and emerging field of Health Promotion Management, but also the data shows jobs within the region exceeding the current volume of annual graduates in health related fields.

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8 Search further limited by: excluding such jobs that required nursing degree; viewing only full-time jobs, and; viewing only jobs posted within the past 15 days.
Summary of employer survey

Thirty-seven Washington State Employers responded to a twenty-question survey. Half of the respondents were employed in organizations with more than 100 employees. The other half worked in organizations of 500 or more employees. At present, a majority of the organizations (59%) employed at least one Wellness Coordinator. Eighty-four percent of respondents noted that they expected to have at least one Wellness Coordinator on staff within five years. Nearly three-quarters of the respondents (74%) stated that they believe health and wellness management is a high growth area. A majority (55%) of respondents stated that they would hire a recent graduate with a BAS in Health Promotion Management, with another 36% answering “maybe” when asked on the survey: Would you be interested in hiring one of these graduates?

When looking to hire a professional to develop, staff, and manage health and wellness programs, half of the respondents indicated that they looked for applicants with a Bachelor’s degree. Another 23% stated that they hire about the same number of employees with Bachelor degrees as those with Associate degrees.

When asked what primary attributes employers look for in hiring a Wellness Coordinator, three stood out. 72% of respondents asserted that knowledge of Healthcare and Wellness Incentives and Regulations was important. 53% indicated that they look for management skills, and 52% specified Lifestyle Coaching expertise as essential. Employers also identified the following secondary skills as either “critical or nice to have:” Exercise Science (94%), Wellness Digital Tools knowledge (88%) and Outdoor Recreation (75%).

As a matter of full-disclosure, question 4 of this employer survey asked: Have you experienced a problem finding qualified bachelor graduates to manage health and wellness programs? 60% of respondents indicated “never.” This response needs explanation.

Interviews with local employers (see below) indicated that all too often wellness programs are turned over to staff within human resource departments who are not prepared to manage and develop these programs by emerging requirements and standards. Legislation such as the Affordable Care Act and Washington State Executive order 13-06 have transformed health care from a field in which diseases are treated into one in which prevention of disease and illness are primary. Elsewhere in our employer survey, employers indicated that they will be hiring new employees over the next five years who meet the new emerging standards. These employers specified that they will seek bachelor level employees with cutting-edge knowledge in wellness incentive, lifestyle coaching and management. While employers currently indicate that they can find qualified employees 60% of the time, it is unlikely that this will continue to be the case as mandated wellness programs are conceived and implemented. Bellevue College’s proposed HPM program is a recognition of and response to this changing environment within organizations.
Interviews with local employers

In 2014 and early 2015, Bellevue College interviewed four representatives from Health and Wellness departments within local businesses and organizations. They were Sonja Dordal, Wellness Coordinator at the Washington State health Care Authority, Pamela Walker, Higher Education Wellness Coordinator of the Health Care Authority, Bascom Brooke, King County Communications and Outreach Manager and Doug Spoon, Health Promotions Manager of the Washington State Department of Labor and Industries. Among these representatives a consensus emerged that indicated a growing need for wellness management professionals in multiple employment sectors. In addition, these representatives stated that wellness programs were expanding and becoming more sophisticated throughout a wide range of organizations. Perhaps most important, these representatives responded positively to the prospect of an applied BAS in Health Promotion Management.

Sonja Dordal, Wellness Coordinator at the Washington State Health Care Authority, for example, endorsed the concept of an HPM program, arguing that there was a growing need for qualified wellness professionals who understand behavior change theory as well as program design and evaluation. She indicated these skills were necessary to create and coordinate more sophisticated wellness programs at Washington State Institutions.

Pamela Walker, Higher Education Wellness Coordinator of the Health Care Authority, found the idea of an HPM program attractive because of its flexibility. She noted that such programs could prepare graduates to work in a variety of organizations. By emphasizing management skills, graduates would be prepared to work in large organization. By emphasizing instructional and wellness coaching expertise, graduates would be prepared to undertake more specialized roles in smaller organizations.

Bascom Brooke, King County Communications and Outreach Manager for Employee Health and Well Being, stated that she sees more and more organizations adopting wellness programs. In her specific organization, she said, positions like Health Educator, Communications Director, Strategic Benefits Planner, and Program Director require a Bachelor’s degree. “When we hire for these positions, she said, we look for skills in organizational change, behavior modification, communications, marketing and familiarity with the subject matter.”

Doug Spoon, Health Promotions Manager at Washington State Labor and Industry, a leader of Employee Wellness programs in Washington State over the past 30 years, and a health expert with experience in corporate and public health, found a Bachelor Program in Health Promotion and Management attractive because such programs introduced students to the science and management of behavior modification. He stated: ‘Employee Wellness and Fitness programs have moved well beyond the Corporate Fitness Center. It is crucial that program managers understand how to design
and implement a variety of activities, assessments and educational opportunities. Leaders need to understand barriers to participation and possess strong interpersonal communication and relationship skills, while fostering teamwork and navigating internal conflict.” Even more important, Spoon noted about the job prospects in Health Promotion and Wellness: “Demand for qualified professionals in all these areas is definitely on the upswing…the need for more qualified health promotion specialists is apparent; too often, wellness programming is turned over to unqualified human resource department staff who are not prepared to develop and manage these programs effectively.”

**National Trends in health care and wellness.**

National trends in health care support unequivocally the development of a Health Promotion and Management Program. Not only do such trends show a changing marketplace for Health Promotion and Management professionals, but also, these trends indicate sweeping cultural changes on how best to deliver health care and wellness programs. Bellevue College’s Health Promotion and Management program seeks to capitalize on these trends by offering a cutting edge curriculum that readies graduates for a 21st century health care culture.

The Affordable Care Act is a significant game-changer. The act shifts the health care system from a fee-for-service system to an incentive system in which providers and businesses are held accountable for the cost and quality of care. This new approach places a premium on preventive care and demands an increase in worksite Health Educators and Wellness Coaches who promote behavioral changes in employees.

Companies are investing in on-site wellness programs because they make good economic sense. Wellness programs reduce sick days, increase productivity and contribute a significant return on investment. A large-scale review of 42 published studies of worksite health promotion programs showed an average of 28 percent reduction in sick days and a 26 percent reduction in health costs overall. A couple of studies by Harvard faculty estimated that every dollar invested in employee wellness programs yielded a return of investment somewhere between three and six dollars.  

Technology and insurance companies are developing wellness monitoring apps as companies shift to the proactive, prevention model. What’s more, a host of organizations have developed online wellness and health services. Web MD, Aduro, Smart Health and Stay Well are examples of such organizations. Not only do these Apps and online services signify new and innovative ways of lowering health care premiums, while empowering health educators and employees with new tools, but also, they indicate innovative companies that might become potential employers of Health Promotions and Management specialists. Web MD Employer Services, Aduro, and Smart Health maintain worksites in the Northwest.

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Although not alone convincing, national trends, nevertheless, strengthen considerably the case to educate and hire worksite wellness and health care professionals who understand incentivized, integrated, and preventative programs. Bellevue College’s innovative BAS degree in Health Promotion and Management offers a sound step in this direction.

Conclusions from labor market and employer data

Based on labor market data, local and state employment projections, graduation data, industry survey and national trends, it is clear that there is a strong need for an applied BAS in Health Promotion and Management. The proposed bachelor of applied science in Health Promotion and Management purports a new type of degree, designed to meet this steadily growing workforce need.

Strong foundation built on existing programs

As the health promotion and management field increasingly integrates practices of behavior modification, care, rehabilitation, treatment, diagnostics and health improvement with the theories and methods of management, the BAS in Health Promotion and Management will necessarily build its program on Bellevue College’s established AAS-T degree programs in Allied Health and Business. Not only will these Bellevue College AAS-T degree programs act as feeder programs, but also students will take courses among these various programs that will cross over to the HPM degree. In addition, the BAS degree in HPM will be built upon existing similar programs at other Washington State community and technical colleges. Several of these colleges have already been contacted by Bellevue College representatives and have expressed strong support for the proposed BAS in Health Promotion and Management – see the section titled “Opportunities for collaboration”.

Bellevue College’s existing foundational programs

As stated, the BAS degree in HPM will be built upon existing AAS-T and AA degree programs at Bellevue College. The College currently offers three associate degrees and two certificates that will serve as feeder programs. They are: an Associate degree in Allied Health (AAS-T); an Associate degree in Marketing Management (AA); an Associate degree in Business Management (AAS-T); a certificate in Personal Fitness Training; and a certificate in Wilderness Skills. In addition the BAS in HPM would also be a good fit for graduates from Bellevue College’s two-year nursing, ultrasound, or other specialized healthcare programs. Descriptions of these existing feeder programs follow below.

AAS-T Allied Heath degree:

The Associate of Applied Science-Transfer Allied Health is a new degree, implemented at Bellevue College in the 2013-2014 school year. The degree bridges allied health certificates and the Allied Health transfer degree. The degree is designed to prepare students to enter the allied health workplace with strong knowledge and skills in college-level math, science, social science and humanities. The degree also provides pathways between a certificate, the associate degree, and an applied baccalaureate degree.

AAS-T in Business Management:
The Associate of Applied Science-Transfer in Business Management combines technical courses required for job preparation and college-level general education courses. The degree provides a strong background to enhance existing business skills and obtain broad based knowledge of business management in the manufacturing, retail and service industries.

**AA in Marketing Management:**

The Associate of Arts Degree in Marketing Management, while not designated as an AS-T degree, contains more than 20 credits of general education courses, and thus would feed directly into the BAS HPM degree.

**Personal Fitness Training Certificate:**

The Personal Fitness Trainer Certificate is designed to prepare students for a variety of fields in the Health and Wellness industry. This certificate may serve as a means of employment as a Fitness Trainer or as a pathway to AA or BAS degrees in Recreation, Health, sports Medicine, Exercise Science or a Teacher Certification program.

**Wilderness Skills Certificate:**

The Wilderness Skills Certificate is designed to prepare students for a wide range of personal or professional opportunities in recreation, outdoor leadership and education. The certificate may serve as a pathway to an AA transfer degree, leading in turn to a four year BA Recreational Leadership degree, a Washington State Physical Education Teaching Certificate, or the BAS in Health Promotion and Management.

**Collaboration and synergies with existing BAS and AAS-T degrees at Bellevue College**

In building upon existing programs at Bellevue College, obvious synergies exist among the College’s established BAS programs, the health and business AAS-T degrees and this new BAS in Health Promotion and Management. During its development phase and once fully established, the BAS in Health Promotion and Management will collaborate with these established programs to leverage these synergies.

To this end, two separate entry tracks for admitted students will be established. Students entering from the AAS-T or AA in business, marketing or management will begin on track A, taking courses in Health and Wellness exclusively during their first quarter. Students entering from the AAS-T in Allied Health proceed on track B, taking courses in business and management exclusively during their first quarter. Having bridged academic gaps in this first quarter, all successful students then form a cohort in the second quarter that continues through completion of the BAS degree programs.

In addition to these tracks, clear synergies exist among management courses in established BAS degree programs. For example, upper division management courses in the BAS Radiation and Imaging Sciences program or the BAS Healthcare Technology may be shared, reciprocal courses with the BAS degree in Health Promotions and Management. What’s more, although the majority of its courses at the 300 and 400 level will be new, upper division general education courses created for the six existing BAS programs at BC will be easily adapted for use in the BAS HPM program.
Collaboration with other professional/technical feeder programs

Six Washington State Community and Technical Colleges have two-year professional/technical degrees in Sports and Fitness Management or similar programs. These programs may serve as additional feeder programs to the BAS degree in HPM. Data in the table below show that graduates from these programs have increased steadily over the past five years. These increasing numbers illustrate a growing interest in health-related programs and underscore a potential stream of candidates for the BAS in HPM program.

**Completion Data CIP code 31.0504 Sports and Fitness Management**

<table>
<thead>
<tr>
<th>Type of degree/cert</th>
<th>2008-2009</th>
<th>2009-2010</th>
<th>2010-2011</th>
<th>2011-2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-year prof/tech degree</td>
<td>25</td>
<td>28</td>
<td>27</td>
<td>40</td>
</tr>
<tr>
<td>certificate 45-89 credits</td>
<td>10</td>
<td>13</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
<td><strong>41</strong></td>
<td><strong>43</strong></td>
<td><strong>59</strong></td>
</tr>
</tbody>
</table>


Student demand

Health Promotion and Management degree addresses unmet student needs

As an applied degree, Bellevue College’s proposed BAS in Health Promotion and Management is being designed to train graduates to be job-ready by teaching the critical skills identified by employers, while at the same time, also teaching skills that are adaptable to rapidly changing circumstances. The degree will provide a pathway to the baccalaureate degree for students with associate degrees from Allied Health and Business-related programs from across the state. In addition, individuals who have been working in the Health Promotion and Management field, but do not have a bachelor’s degree will have the opportunity to earn the BAS credential while simultaneously broadening and deepening their skills. Perhaps most important, this new degree will create a pathway for place-bound students with no alternatives to transfer their technical associate’s degree into a traditional bachelor’s traditional program.

Opportunities for students with professional technical associate degrees or certificates in allied health or business, or in any of the various feeder programs outlined above to transfer into traditional bachelor degree program in health related fields are limited. Students of this kind interested in the University of Washington’s Bachelor of Science program in public health, for instance, do not meet the admission requirements without undertaking additional preparatory coursework. This is also true of Western Washington health degree programs, including its B.S. degree in Community Health. What’s more, both the University of Washington’s public health program and Western Washington University’s community health program specialize in emerging diseases, environmental and geographical effects on
health, or health education theory and practice. These various emphases differ significantly from the Bellevue’s College’s proposed applied HPM degree with its emphasis on wellness promotion and management. Hence, expressed demand for applied and specialized education in the field of health promotion and management is not only in excess of opportunity to enroll in traditional bachelor programs, but also cannot be met by the particular programs of study offered at the public universities.

**Student survey**

During spring and summer AY 2014, Bellevue College surveyed students with Personal Fitness Trainer program certificates, students currently enrolled in the Personal Fitness Trainer certificate program, and students attending Wellness and Allied Health classes. When asked about interest in a BAS degree in Health Promotion and Management, survey respondents expressed strong support for the development of such a degree. They saw the new degree program as an opportunity to broaden their skills and obtain a bachelor’s degree in a job market that increasingly requires bachelor’s graduates. Below are some key indicators from this survey.

- 87% of respondents stated they would consider enrolling in this new degree program
- Respondents indicated interest in several positions for which the HPM program could offer them preparation: Health Fitness Specialist (60%), Wellness Coach (58%), Corporate Health Manager (27%), and Wellness Coordinator (25%) (Note: responses equal more than 100% because students could respond to more than one option)
- When asked to indicate “most important reasons” for interest in the new degree, respondents specified: “Increased employment opportunities” (76%); “Interest in health and wellness” (74%), “Earn a good living” (67%)

**Maximizing state resources: Health Promotion and Management**

Bellevue College’s new bachelor’s degree in Health Promotion and Management will augment the knowledge students have gained through their certificates and associate degrees and will provide a solid foundation in general education and advanced skills necessary for the great variety of jobs in the Health Promotion Management field. It will provide students the opportunity to earn an affordable bachelor’s degree focused on the knowledge and technical skills employers are seeking.

The program will increase the number of overall bachelor’s degree holders in the state who fill critical jobs by serving professional and technical associate degree holders who are otherwise limited in pursuing a bachelor’s degree. It will also provide opportunities for place-bound students interested in a career in Health Promotion and Management.
The degree is being designed with working adults in mind. The majority of classes will be offered in hybrid format to maximize flexibility in scheduling and access for place-bound and/or working students. In addition to providing access and convenience for students, hybrid and online classes allow more efficient use of resources such as classroom space, allowing more students to be served without requiring as many physical resources.

As previously noted, students will have access to upper division elective and general education courses developed for baccalaureate degrees already offered at Bellevue College. Students will have increased choices, and previously developed curriculum will be more broadly utilized, creating cost efficiencies in program development.

Bellevue College will be offering this degree on a self-support model, further maximizing limited state resources. Based on the number of graduates from existing two-year degrees and on BC’s experience with existing BAS programs, the College projects that the program will be at full capacity within four years, producing a minimum of 30 graduates per year.

Opportunities for collaboration

Bellevue College works closely with our CTC system partner colleges to provide smooth transitions for two-year technical degree graduates who wish to enter a baccalaureate program. During the next year, as we establish and finalize curriculum, Bellevue College plans to develop articulation agreements with system colleges so that students graduating from allied health and business-related programs who wish to go on to the baccalaureate will have a clear pathway into the BAS in Health Promotion and Management degree.

Bellevue College representatives have initiated contact with several two-year and four-year health promotion-related programs in Washington State to assess the interest of two-year potential feeder programs into the new BAS degree (see feeder program section above), and the possibility of collaboration with existing four-year programs. Members of Bellevue College’s Physical Education department, for example, have recently reached out to Western Washington’s Community Health Bachelor’s program to explore areas of common ground and cooperation. Bellevue College is awaiting response from this effort and looks forward to cultivating its relationship with WWU’s program. Bellevue College has also made contact with the University of Washington’s Department of Health Services. Jeff Harris, Director of the University’s Health Services Department expressed pleasure upon hearing about BC’s potential Health Promotion and Management Program and stated that graduates of the Bellevue College’s HPM program would be suitable candidates for all tracks of the University’s Master of Public Health degree. Finally, initial discussions have also been made with Western Governor’s University to explore pathways for the new BAS graduates into Master’s programs.

All conversations of this kind have been very positive and suggest that multiple Washington-based education institutions are supportive of the development of Bellevue College’s HPM program and will be receptive to graduates for advanced work after completion of the BAS degree.

Bellevue College will continue to work with colleges and universities to ensure that students who complete the college’s existing applied baccalaureate degrees have options to continue to graduate school if they want to pursue further education. When detailed curriculum has been developed, these
conversations will progress to concrete discussion of pathways beyond the baccalaureate for Health Promotion and Management graduates.

Unique aspects of proposed program

Bellevue College’s BAS in Health Promotion and Management will be different from a traditional four year college degree in several aspects:

- The program will be designed to meet an emerging workforce need as indicated by changing approaches to health in the United States.
- The BAS program will be built to offer a balance of theory and practice where students will apply what they learn in a project-based environment that emulates the workplace. This will facilitate students’ transition into employment and make graduates more efficient once employed in an organization.
- In addition to knowledge and skills, employers look for candidates that can demonstrate strong “soft” or general employability skills. The BAS program will emphasize these skills within the context of wellness management by stressing focus on communication and team skills in its curriculum. Throughout the curriculum, behavior modification, organizational change, marketing and motivational skills will be emphasized as well.
- While two-year graduates from professional/technical degrees often are limited in their options for advanced education, the BAS degree will be designed specifically to meet the needs of these graduates through articulation agreements with existing two-year degrees throughout Washington State.
- Bellevue College’s new HPM BAS will provide students with practical skills and experiences directly transferable into the workplace.

Conclusion

Bellevue College looks forward to speaking with SBCTC system trustees about our plans for an applied baccalaureate degree in Health Promotion and Management. We are excited about this opportunity to build on our strong associate degree programs and partnerships with employers. The BAS in Health Promotion and Management will provide a new option for holders of technical associate degrees, meet transfer needs of community college students at BC and other systems colleges, and be tailored specifically to address the unique employer needs of the Puget Sound region.

Appendix A: Student and Employer Survey Reports
HPM BAS Employer Survey Report

Survey Title: Health & Wellness Promotions BAS Employer Survey 2014

Responses By Question Analysis:

1. When hiring a professional to develop, promote and/or manage health and wellness programs, what level of education would you look for? We hire: (please, select one)

<table>
<thead>
<tr>
<th>Response</th>
<th>Total</th>
<th>Percent</th>
<th>Points</th>
<th>Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primarily high school graduates</td>
<td>3</td>
<td>9%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Primarily associate (2-year) degree graduates</td>
<td>4</td>
<td>11%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>About the same number of bachelor's and associate (2-year) degree graduates</td>
<td>8</td>
<td>23%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Primarily bachelor's degree graduates</td>
<td>17</td>
<td>49%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Primarily master's degree and above graduates</td>
<td>3</td>
<td>9%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Total Respondents 35 100%

(skipped this question) 3

2. If you prefer to hire individuals with a bachelor's degree, as compared to those with a master's degree or associate's degree, please tell us why.

1. Believe a Bachelor's degree will meet the business needs of the agency. A BA degree should provide the level of expertise needed to administer wellness. Additionally, State Agencies receive adequate guidance from the State Health Care Authority for an incumbent with a BA degree to implement. A master's degree maybe preferable if compensation remain the same.

2. We cannot afford to employ a specialist in health/wellness. This position would need another primary function such as safety, industrial hygiene, risk management, or a similar function.

3. Someone with a Bachelor's degree has more education and background and hopefully experience to do the job well. They have already set a commitment to what they want to do in their future and a desire to promote and educate staff about health and wellness activities.

4. Looking for the right fit, a person with a passion for health & wellness, and an overall individual who is a team player.

5. A degree can be obtained in many fields without a direct correlation to the position they are hired for in the end. Knowledge of the staff within the wellness community would be more advantageous than someone new.

6. My belief is that a BA level is sufficient (initially). It's the 'real' hands-on experience under the tutelage of an experienced organizational wellness professional that'll make the difference. Graduates will need to understand human and organizational behavior.
7. Sometime people with master degrees are more academic than practical.

8. I believe that the bachelor degree has an adequate level of learning, as well as applying evidence based practices.

9. We've never hired specifically for a health and wellness coordinator but the nature of our work requires, in almost all cases, at least a bachelors or higher degree.

10. Master's degree graduates usually demand a higher salary and are beyond a "developmental" status

To be honest, I'm the only one that has done wellness for our agency since WA Wellness was formed. I started at my agency in March 2006. At my first staff meeting with the Director, she was telling management that she needed to appoint someone to do wellness. I volunteered since I had a Bachelor's in Community Health Education from CWU and have been doing it since. I wasn't hired to do it and it's not part of my job until recently. It is finally being written in my job description and is becoming important to our agency now since the Executive Order went out from the Governor recently. I put Bachelor's because that's what I have so in the future, if I were to leave, I would hope they would be looking for someone with at least the same level of education. Thanks.

11. Often, of times a master's degree could almost be an over-qualification for a typical entry-level health-promotions position. A BAS is more desirable as students have taken the specialty curriculum compared to typical AAS.

12. An AA doesn't offer the full spectrum of skills we look for. A BA offers a more well-rounded education.

13. The position would be a mid-management position and positions within our organization at this level all require a 4-year degree. The skills and knowledge and level of responsibility of this type of position would best match a bachelor's degree.

That's the "coin of the realm for HR staff and environmental staff alike in our agency, and anyone hired to do this job would also have other duties that involve either professional HR or environmental work.

14. We are a small agency and have never hired a health and wellness coordinator position. However, the agency would be interested in this level of expertise and would support an employee getting this degree.

15. I don't believe that a master's degree is necessary for a wellness advocate to be effective.

16. We consider this type of position to be an entry level health position.

17. I would be looking for more hands-on/real life experience than just a higher level degree.

18. Bachelor's degree plus additional 2-4 years of experience developing and or managing wellness programs.

19. Our minimum requirements usually require a bachelor's degree or equivalent experience as a substitute for education. Therefore, if someone at an associate's degree with two additional years of experience, they would be considered a viable candidate. At this point, we do not see a need to a master's degree level of education for this time of position.

20. It's the minimum level of education I'd prefer. Master degree candidates would also be welcomed.

21. Most often required level of schooling.

Total Respondents (skipped this question) 23

3. When hiring someone to develop, promote and/or manage health and wellness programs, do you look for candidates with a nationally recognized certification?

<table>
<thead>
<tr>
<th>Response</th>
<th>Total</th>
<th>Percent</th>
<th>Points</th>
<th>Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>3</td>
<td>9%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>No</td>
<td>27</td>
<td>77%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>If yes, which certification would you require?</td>
<td>view</td>
<td>5</td>
<td>14%</td>
<td>n/a</td>
</tr>
</tbody>
</table>
4. Have you experienced a problem finding qualified bachelor's graduates to manage health and wellness programs?

<table>
<thead>
<tr>
<th>Response</th>
<th>Total</th>
<th>Response Percent</th>
<th>Points</th>
<th>Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequently</td>
<td>4</td>
<td>13%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Sometimes</td>
<td>8</td>
<td>27%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Never</td>
<td>18</td>
<td>60%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Total Respondents 30 100%

5. If you answered "frequently" or "sometimes", please tell us why and for what job titles?

1. Knowledge and experience
2. We have never recruited for such a position.
3. Only the wellness programs because our Wellness Coordinator position is volunteer. The person has a full-time position already, this is just extra work with no pay. They do is because they care about staff and want to help them. Because as of this date, the position has been considered an additional job task, volunteer, and ultimately on top of the employee's already measured performance and is considered a "perk" to volunteer more of one's time.
4. This opportunity did not come up due to the fact that there were no such open positions for Wellness
5. We've never hired an individual to serve in this exclusive position and likely wouldn't.
6. The Department has not filled a formal position for this body of work. It is has been assigned as an "additional duty"
7. These questions don't really pertain to me because of my comments on #2. You may find this the case with several state agencies.
8. Sometimes - I selected this one so I could type in the box - we have not recruited much for this type of position.
9. question 4 & 5 not applicable; I'm not a hiring manager
10. We do not have a specific job classification.
11. We don't have that position at CTS currently.
12. Generally, a master's degree shows that there are certain skills and abilities that the candidate has exhibited. A person with a focus on health at the bachelor's level, combined with 5 years of experience, is someone who I would look at as potentially being comparable.

6. Employment projections indicate health and wellness management is a high growth area. Is this your perception?

<table>
<thead>
<tr>
<th>Response</th>
<th>Total</th>
<th>Response Percent</th>
<th>Points</th>
<th>Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>25</td>
<td>74%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>9%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Don't know</td>
<td>4</td>
<td>12%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Comments?</td>
<td></td>
<td></td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Total Respondents 34 100%

7. Would a 4-year applied bachelor's degree in Health and Wellness Promotions Management benefit your organization?
8. If you answered "yes" to the previous question, what do you believe those benefits would be? Check all that apply.

<table>
<thead>
<tr>
<th>Response</th>
<th>Total</th>
<th>Response</th>
<th>Percent</th>
<th>Points</th>
<th>Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interns for your organization</td>
<td>13</td>
<td>38%</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Better skilled employees</td>
<td>12</td>
<td>35%</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Money saved in not having to train incoming employees</td>
<td>7</td>
<td>21%</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Money saved in not having to recruit out of state</td>
<td>5</td>
<td>15%</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Other, please specify</td>
<td>1</td>
<td>3%</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
</tbody>
</table>

Total Respondents: 34

9. Would you hire a recent graduate with a bachelor’s degree in Health and Wellness Promotions Management if a position became available?

<table>
<thead>
<tr>
<th>Response</th>
<th>Total</th>
<th>Response</th>
<th>Percent</th>
<th>Points</th>
<th>Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>18</td>
<td>55%</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>9%</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Maybe</td>
<td>12</td>
<td>36%</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
</tbody>
</table>

Total Respondents: 33

10. What critical skills or knowledge do you look for in hiring a Health/Wellness Manager/Coordinator?

<table>
<thead>
<tr>
<th>Critical</th>
<th>Nice to have</th>
<th>Not important</th>
<th>Response Total</th>
<th>Points</th>
<th>Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management (Risk management, program development, budget)</td>
<td>53.12% (17)</td>
<td>43.75% (14)</td>
<td>3.12% (1)</td>
<td>32</td>
<td>n/a</td>
</tr>
<tr>
<td>Exercise Science (Fitness prescription, health assessment, special populations)</td>
<td>28.12% (9)</td>
<td>65.62% (21)</td>
<td>6.25% (2)</td>
<td>32</td>
<td>n/a</td>
</tr>
<tr>
<td>Lifestyle Coaching (Behavior modification, nutrition, disease progression)</td>
<td>51.61% (16)</td>
<td>41.94% (13)</td>
<td>6.45% (2)</td>
<td>31</td>
<td>n/a</td>
</tr>
<tr>
<td>Outdoor Recreation (Team building, experiential learning, trip planning)</td>
<td>6.25% (2)</td>
<td>68.75% (22)</td>
<td>25% (8)</td>
<td>32</td>
<td>n/a</td>
</tr>
</tbody>
</table>
Healthcare and Wellness
Incentives and Regulations
Health/Wellness Digital Tools, Apps and Devices

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare and Wellness</td>
<td>71.88%</td>
<td>23</td>
</tr>
<tr>
<td>Incentives and Regulations</td>
<td>21.88%</td>
<td>7</td>
</tr>
<tr>
<td>Health/Wellness Digital Tools, Apps</td>
<td>32.26%</td>
<td>10</td>
</tr>
<tr>
<td>and Devices</td>
<td>54.84%</td>
<td>17</td>
</tr>
</tbody>
</table>

Total Respondents: 32

11. What is the size of your organization in terms of number of employees?

<table>
<thead>
<tr>
<th>Size</th>
<th>Response Total</th>
<th>Response Percent</th>
<th>Points</th>
<th>Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25</td>
<td>0</td>
<td>0%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>25-50</td>
<td>0</td>
<td>0%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>51-99</td>
<td>2</td>
<td>6%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>100-499</td>
<td>13</td>
<td>41%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>500 or more</td>
<td>17</td>
<td>53%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Total Respondents: 32

12. How many health/wellness managers/coordinators does your organization currently employ?

<table>
<thead>
<tr>
<th>Number</th>
<th>Response Total</th>
<th>Response Percent</th>
<th>Points</th>
<th>Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>13</td>
<td>41%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td>15</td>
<td>47%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-10</td>
<td>2</td>
<td>6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-25</td>
<td>1</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 25</td>
<td>1</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Respondents: 32

13. In which Department do your health/wellness managers/coordinators work and what titles do they have?

2. Safety Office, Safety Consultant
3. HR-Manager of Benefits and Compensation
   In the Health Services Department we have: Health Care Manager 3, Health Care Manager 1, Behavioral Health Manager, and Health Care Manager. In the Human Resource Department we have: HR Consultant 3 and 2. Our Wellness Coordinator is a non paying position. It is a volunteer position.
4. The work is in addition to someone’s job.
5. Human Resources
6. Human Resources
7. The work is in addition to someone’s job.
8. Consultant, Wellness Assistant, Wellness Social Media Coordinator, Wellness Webmaster, Wellness Program Developer
9. Human Resources, Wellness Coordinators
10. N/A

11. Aging and Long Term Care Administration/Department of Social and Health Services
Program Manager, Project Coordinator

12. HR Division "Risk Management"

My comments on #2 will answer #14 and #15. I'm the wellness coordinator but it's voluntary. I work in the Director's Office. That's where it has been since 2006 and will stay for now but there has been talk about how it should belong in Human Resources.

13. Ours is essentially a committee with 2 co-chairs

14. We are housed in Communications. Titles are Wellness Coordinator, Wellness Program Manager.

15. Parks and Community Services - Fitness Coordinator

It's me, and I have both the title of Safety Manager (which accounts for most of my duties) and agency Wellness coordinator.

The Health and Wellness Coordinator is the Operations Administrative Assistant. The coordinator position was by volunteer.

16. n/a

17. Human Resources - Human Resource Consultant 4 (Other duties as assigned aka Wellness Coordinator)

We currently have volunteer wellness coordinators, who promote wellness in addition to their "day jobs."

18. Human Resources

Each Administration within DSHS has a volunteer wellness coordinator. Staff who volunteer to serve in this role perform other primary functions within their job classification.

19. HR/Personnel Office - HR Manager and HR consultants
Budget Office - Budget Analyst
Policy Office - Policy Advisor
Accounting - SR Financial Analyst
Forecasting - Analyst
Office of the Director - Communications/Publications Coordinator

20. Employee benefits: Director and Health Consultant Level 4

21. HR - Training and Development Consultant

22. In the past, they have been housed in the HR department.

23. Total Respondents

Respondents

<table>
<thead>
<tr>
<th>None</th>
<th>5</th>
<th>17%</th>
<th>n/a</th>
<th>n/a</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>21</td>
<td>70%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>6-10</td>
<td>2</td>
<td>7%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>11-25</td>
<td>0</td>
<td>0%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>More than 25</td>
<td>2</td>
<td>7%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Total Respondents 30 100%

( skipped this question) 8

24. 14. How many health health/wellness managers/coordinators do you think your organization will have in the 5 years?

25. 15. Please identify the primary sector for your organization?
16. Where is your organization's service area?

<table>
<thead>
<tr>
<th>Response</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastside area</td>
<td>3</td>
<td>9%</td>
</tr>
<tr>
<td>Greater Seattle area outside the Eastside area</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Western Washington outside the Greater Seattle area</td>
<td>12</td>
<td>38%</td>
</tr>
<tr>
<td>Eastern Washington, east of the Cascade Mountains</td>
<td>2</td>
<td>6%</td>
</tr>
<tr>
<td>National</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>International/ Global</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>14</td>
<td>44%</td>
</tr>
</tbody>
</table>

Total Respondents 32
(skipped this question) 6

17. Please, provide any additional comments below.

1. I think it's great that you are considering doing this! Has wonderful potential if done correctly. I cannot stress enough the importance of including organizational behavior within the curriculum. Would also encourage you to present a comprehensive model, including the multiple factors that influence employee productivity.

2. We may be interested in having an intern in the future. I would like to know how I can further my education in regards to this new program myself. I got my degree in 1996 and so much has changed. You need to have a nursing degree now in Community Health Nursing and not education now. I could have used this exact program back then but luckily I was able to "volunteer" as our wellness coordinator. I knew it would pay off eventually and that Community Health Education would become more of a priority one day. I'm also on the Wellness Advisory Board with Sonja and Pam from PEB.

3. Central has a BA in Community Health. We have had interns from this program and they are fabulous. You might consider taking a look at that program.

4. If the state would provide funding so each institution could have a full time wellness coordinator that would be fantastic. At this point in time our college is having any interested individuals who have a passion for wellness try and head it up. It's a job on top of a job.
HPM BAS Student Survey Report

Survey Title: Health and Wellness BAS Student Survey 2014

Survey Properties:

Total Respondents: 76  
Launched Date: N/A  
Closed Date: 09/30/2014

Responses By Question Analysis:

1. What college do you currently attend? If you are not currently enrolled in a college, please, skip to question 5.

1. Bellevue College  
2. Bellevue College  
3. bellevue college  
4. Bellevue College  
5. Bellevue College  
6. Bellevue College  
7. Bellevue College  
8. Bellevue College  
9. Bellevue College  
10. Bellevue College  
11. Bellevue College  
12. Bellevue College  
13. Bellevue College  
14. Bellevue College  
15. Bellevue College  
16. Bellevue College  
17. Bellevue College  
18. Bellevue College  
19. Bellevue College  
20. Bellevue College
I currently attend Bellevue college

I attend Bellevue College.

university of washington

Bellevue College

Bellevue College

Bellevue College

Bellevue college

Edmonds CC and Bellevue College

Bellevue College

Bellevue College

Bellevue College

Bellevue College

Bellevue College

Bellevue College

Bellevue

Bellevue College

Bellevue College

I attend Bellevue College

Bellevue College

Bellevue College

Bellevue College

Bellevue College

I am currently attending Bellevue College.

Bellevue College

Bellevue College

Bellevue college

Bellevue college

Bellevue College

Bellevue college

Bellevue College

Bellevue College

Bellevue College

Bellevue College

Bellevue College

Bellevue College

Bellevue College, Bellevue, WA
67. Bellevue College.

<table>
<thead>
<tr>
<th>Total Respondents</th>
<th>67</th>
</tr>
</thead>
<tbody>
<tr>
<td>(skipped this question)</td>
<td>9</td>
</tr>
</tbody>
</table>

2. What is your current educational goal? Check all that apply.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Response Total</th>
<th>Response Percent</th>
<th>Points</th>
<th>Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>29</td>
<td>41%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>2-year degree</td>
<td>28</td>
<td>39%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Professional development</td>
<td>12</td>
<td>17%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Degree transfer to a 4-year institution</td>
<td>26</td>
<td>37%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>4</td>
<td>6%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Total Respondents: 71

3. What is the name of the program/degree you are currently enrolled in?

1. N/A
2. Running Start
3. Nursing program
4. Arts and Science Degree
5. Associate in Art and Science
6. Personal Fitness Trainer
7. Running Start
8. Running Start
9. Associate's in Arts and Sciences Running Start Dual Enrollment
10. N/A, but possibly Personal Fitness Trainer
11. Personal Trainer Certificate
12. Personal Fitness Trainer
13. Science transfer degree
14. Associates of Arts-Direct Transfer Agreement
15. Transfer degree, prerequisites
16. Personal training certificate.
   Associates in arts and science
17. General Classes
18. HLTH 262/Health Sciences Dept
19. Personal Training
20. Psychology
21. CEO Program
22. Associates of Arts and Science degree.
23. Transferable degree
25. Health 250
26. I am in general ed, will transfer to Northwest University's Intercultural Studies BA program.
27. Nursing
28. Allied Health AA and Emergency Dept tech
29. Health Unit Coordinator
30. Health Profession Basic and Medical Receptionist
31. Running Start
32. Phlebotomy / Clinical Lab Asst
33. Phlebotomy/Clinical Lab Assistant
34. I am acquiring my AAS-DTA Associate in Arts & Sciences. I have yet to be accepted into an associate
   in arts degree program.
35. Wilderness Skills Certificate
36. Personal Trainer Certificate
37. Medical Reception
38. Associate in Art and Science Degree.
39. Running Start
40. Phlebotomy / Lab tech.
41. Allied Health/Phlebotomy as well as completed and applied to the Diagnostic Ultrasound program at
   BC. Would love to see the Sonography program as a bachelors program.
42. Phlebotomy
43. Nursing
44. I am going to receive a general associate degree.
45. Associates of Science
46. Computer Science
47. Phlebotomy and clinical lab assistant
48. Undecided (Healthcare)
49. Currently I am working towards the clinical lab certification
50. Allied Health Education Laboratory (AHEL)
51. Phlebotomy & Clinical Lab assistant
52. Allied Health
53. Elementary Eduction
54. None - prerequisites
55. Radiological Technology. Currently not enrolled, denied the first round and will reapply next year.
56. CAHIMS and Phlebotomy Technician
57. Neurodiagnostic Technology
58. Nursing prerequisites
59. Planning to be accepted to nursing transfer degree
60. ETD, AA
61. Neurodiagnostic Technology
62. Medical Administrative Assistance
63. Clinical Laboratory Assistant
64. Medical Administrative Assistance degree
65. Allied health education
66. Emergency Department Technician

Total Respondents: 66

4. What is the highest level of education you have completed?

<table>
<thead>
<tr>
<th>Response</th>
<th>Total</th>
<th>Percent</th>
<th>Points</th>
<th>Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school diploma</td>
<td>16</td>
<td>25%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>31</td>
<td>48%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>2-year degree</td>
<td>6</td>
<td>9%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>11</td>
<td>17%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Master's degree or higher</td>
<td>0</td>
<td>0%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Total Respondents: 64

5. If you have a degree, please specify title (ex: BS in Exercise Science)

1. Associate of Arts
2. N/A
3. Visual Communication
4. N/A
5. n/a
6. After this quarter I will have an AA
7. no
8. N/A
9. AA in Business Technology from Everett CC
10. N/A
11. n/a
12. N/A
13. BSBA Management
14. Transfer
15. BA in Media and Theatre Arts
16. None
17. N/A
18. N/A
19. Doctor degree
20. BS in fine arts
21. BA Business Admin and Psychology
22. BS in Chemistry with Math minor
23. BS in Marketing
24. BA in Recreation & Parks
25. N/a
26. Asssociate Degree in Medical Laboratory Technology
27. I would like have degree
28. BS in Biology
29. none
30. None
31. BA in English Literature.

**Total Respondents**

<table>
<thead>
<tr>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
</tr>
<tr>
<td>45</td>
</tr>
</tbody>
</table>

**6. Have you heard of Health & Wellness Promotions?**
7. If Bellevue College offered a bachelor's degree in Health & Wellness Promotion Management, would you consider participating?

- Yes: 20 (30%)
- No: 46 (70%)
- Total Respondents: 66

8. If you answered "yes" or "maybe", which area of study interests you? Check all that apply.

- Fitness Center Director: 15 (21%)
- Outdoor Recreation Manager: 14 (20%)
- Wellness or Health Coach: 38 (54%)
- Corporate Health and Wellness Manager or Consultant: 18 (26%)
- Health Fitness Specialist: 37 (53%)
- Wellness Program Coordinator: 16 (23%)
- Wellness Ambassador or Guide for drug stores: 7 (10%)
- Senior Center Wellness consultant: 8 (11%)
- Affordable Healthcare Act Wellness Coordinator: 17 (24%)
- Other, please specify: 9 (13%)

Total Respondents: 70

https://www.bellevuecollege.edu/surveys/CustomReport.aspx...
9. Which instruction mode would you prefer in completing a BAS degree program like this?

<table>
<thead>
<tr>
<th>Instruction Mode</th>
<th>Response Total</th>
<th>Response Percent</th>
<th>Points</th>
<th>Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>online and/or remote instruction only</td>
<td>7</td>
<td>11%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>hybrid, face-to-face part of the time</td>
<td>33</td>
<td>50%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Only face-to-face instruction</td>
<td>26</td>
<td>39%</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Total Respondents: 66 (100%)

(skipped this question) 10

10. Please, provide any additional comments.

1. N/A

2. I’d like to see a program that could be completed quickly with options available quarterly in person and online. There may be people who might not locally be able to take all the courses every quarter so it would be nice if students might be able to manipulate certain quarters conducive to online learning when necessary.

3. I’m really excited about Bellevue college adding a Health and Wellness BS program

4. Including education in Alternative and holistic methods for health and wellness would be valuable to me.

5. Also hybrid face to face part of the time.

6. I feel like daily face-to-face classes are better than the 2 hr blocks. Better for repetition and solidifying information. Hybrid could be better for homework, but most learning and tests should be done in person. I think it would be great to have this program at the school!

7. None.

8. good start and I support it!!

9. N/A

10. I feel that the most important aspect is the opportunity to attend while getting real world hands on training.

11. This is Abigail Alonzo

12. Please create this program! asap!

13. I think this program would be beneficial for those who are interested in this degree at my school Bellevue College.

14. no

15. This is a good choice for people who are interested in health and wellness bas.

16. I think this program would be very beneficial

17. I am very passionate about children and I think a program like wellness and health focused on them would be very helpful and nice to take.

18. Hybrid is always a good option because it is easier for students that have different learning styles be more successful

19. This degree would only be of interest to me, as said previously, if it were marketable.

20. none

21. will be very good if college have program after graduation guaranty job

22. I think this would be a great program to offer!
22. I would be interested in knowing more about the subjects that I would take to complete this degree.

<table>
<thead>
<tr>
<th>Total Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
</tr>
<tr>
<td>(skipped this question)</td>
</tr>
<tr>
<td>54</td>
</tr>
</tbody>
</table>
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Bellevue College statement of need: BAS in Healthcare Management & Leadership
Cover Sheet for New Degree Program Proposal

Program Information

Institution Name: Bellevue College

Degree Name: Healthcare Management & Leadership, BAS  CIP Code: 51.0701

Existing technical associate degrees that will serve as the foundation for this program:

<table>
<thead>
<tr>
<th>Degree</th>
<th>CIP Code</th>
<th>Year Began</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied Health, AAS-T</td>
<td>51.0000</td>
<td>2013</td>
</tr>
<tr>
<td>Diagnostic Ultrasound, AA</td>
<td>51.0910</td>
<td>1991</td>
</tr>
<tr>
<td>Neurodiagnostic Tech, AA</td>
<td>51.0903</td>
<td>2011</td>
</tr>
<tr>
<td>Nuclear Medicine Tech, AA</td>
<td>51.0905</td>
<td>2007</td>
</tr>
<tr>
<td>Radiation Therapy Tech, AA</td>
<td>51.0993</td>
<td>2011</td>
</tr>
<tr>
<td>Radiologic Tech, AA</td>
<td>51.0907</td>
<td>1991</td>
</tr>
<tr>
<td>Business Management, AAS-T</td>
<td>52.0201</td>
<td>1995</td>
</tr>
<tr>
<td>Marketing Management, AA</td>
<td>52.1401</td>
<td>1991</td>
</tr>
</tbody>
</table>

Proposed Start Implementation Date: Fall 2016

Projected Enrollment (FTE) Year I: 20 at Full Enrollment by Year: 2019

Funding Source: State FTE: ☐ Self-Support: ☒ Other: ☐

Mode of Delivery

Distance Learning: Online, synchronous and asynchronous.

Contact Information (Academic Department Representative)

Name: Maurya Radvilas
Title: Program Chair
Address: 3000 Landerholm Circle SE Bellevue WA 98007
Tel/email: (425) 561-2507 / mradvila@bellevuecollege.edu

Bellevue College statement of need: BAS in Healthcare Management & Leadership
Introduction to the degree

Bellevue College proposes a bachelor of applied science (BAS) degree in Healthcare Management & Leadership (HCML). This new degree will be built by extracting management concentrations from existing Healthcare Technology & Management (HCTM) and Radiation and Imaging Sciences (RAIS) BAS degree programs to create a stand-alone Healthcare Management and Leadership Degree. The reorganization of the HCTM and RAIS management concentrations into a separate, new degree under a singular Healthcare Management & Leadership program will continue to meet the needs of local employers while also improving marketability and degree recognition for graduates.

The proposed degree in Healthcare Management & Leadership will use curriculum already developed and established in 2007 as a part of the management concentration in the BAS in Radiation and Imaging Science, the college’s first BAS degree. This RAIS management curriculum will be augmented and enhanced by combining it with the management curriculum of the Healthcare Management concentration within the BAS Healthcare Technology and Management degree program. The latter degree program, established in 2013, extended healthcare management opportunities to students from a variety of healthcare backgrounds, as well as to those students transitioning from management, accounting, marketing or other business related programs. Bellevue College found that having management concentrations under two different healthcare degree programs was confusing for students. The decision to combine the management concentrations from these two degrees into one new degree, the College believes, will clarify pathways for students and employers.

This degree will teach students the essentials of leadership and provide them an overview of the business and administrative functions of healthcare. Graduates will be well suited to become effective managers and administrators in hospitals, clinics and healthcare centers. Program outcomes include:

- Applying administrative and business skills to solve problems, evaluate outcomes, and assess quality and performance in healthcare settings
- Demonstrating an understanding of leadership, ethical and multicultural issues as they pertain to healthcare
- Applying effective communication and management practices in healthcare settings
- Applying economic and financial management principles to healthcare organizations
- Demonstrating an understanding of the impact of information technology systems and applications on healthcare organizations and workflow processes
- Demonstrating a thorough understanding of safety, quality and regulatory issues and processes in a wide range of healthcare settings
- Managing, analyzing and presenting healthcare data for effective decision-making in support of a wide array of healthcare practices such as meaningful use initiatives, patient safety studies, and revenue cycle management
- Serving as liaison between technical and clinical functions to support users, including training and documenting the use of new technologies

Bellevue College statement of need: BAS in Healthcare Management & Leadership
The following proposal demonstrates how the new applied baccalaureate degree in Healthcare Management & Leadership supports the college’s mission and goals; addresses the goals of the state’s master plan for education; meets student and employer demand; addresses a skills gap, and offers general information on the new curriculum.

**Relationship to institutional role, mission and program priorities**

Bellevue College requires that every new program align to its mission, which states:

> Bellevue College is a student-centered, comprehensive and innovative college, committed to teaching excellence, that advances the life-long educational development of its students while strengthening the economic, social and cultural life of its diverse community. The college promotes student success by providing high-quality, flexible, accessible educational programs and services; advancing pluralism, inclusion and global awareness; and acting as a catalyst and collaborator for a vibrant region. (Approved by Board of Trustees, June 11, 2008.)

Developing baccalaureate degrees is a fully integrated component of Bellevue College’s strategic planning. “Applied Baccalaureate Development” is a president’s cabinet-level priority, with goals assessed annually. In 2013-14, Bellevue College’s President David Rule established an **Academic Master Plan** under his 5 year Strategic Plan which includes a mandate to “create bachelor degrees that address economic needs; [and] establish a sustainable business model and marketing strategy for these programs.”

Baccalaureate degrees are developed through careful consideration of the college’s strengths, strategic enrollment goals and workforce needs. Also considered are community demand, and the sustainability of each proposed degree. In addition to continuing education, certificates, professional/technical degrees and transfer degrees, baccalaureate degrees are a means through which Bellevue College provides the level of education required by local employers and citizens. As the entry level criterion shifts from a two-year to a four-year degree in multiple fields, Bellevue College assesses the need for applied bachelor’s degrees to meet demand for highly skilled employees, and to ensure that our area residents will have access to the education they need to succeed in their chosen fields.

In 2009, Bellevue College was granted accreditation by the Northwest Commission of Colleges and Universities (NWCCU) to offer baccalaureate degrees. The college currently offers six bachelor’s degrees: BAS in Data Analytics, BAS in Healthcare Technology and Management (HCTM), BAA in Interior Design, BAS in Information Systems and Technology, BS in Nursing, and BAS in Radiation and Imaging Sciences (RAIS). In addition, BAS degrees in Molecular Bioscience and Applied Accounting were recently approved by SBCTC trustees for development. Baccalaureate degrees play an important role in Bellevue College’s commitment to provide high quality, flexible, accessible education programs and to
strengthen the economic life of its diverse community.

The proposed Healthcare Management & Leadership degree will support the need for programs that strengthen the economic life of our community. Bellevue College began developing health related Bachelor of Applied Science degrees in response to substantial documented demand from hospitals and clinics throughout the state. The HCTM and RAIM programs are direct responses to the well-documented gaps in skills and employment in health care, a key growth industry. A Baccalaureate degree in Healthcare Management addresses these same healthcare gaps by preparing graduates to manage hospital and clinic growth as well as employee development, earning potential and promotion.

The primary mission of Bellevue College is to provide high quality and flexible education programs that are consistent with the needs of students and which support the economic, social, and cultural needs of the community. Bellevue College’s Strategic Plan notes the college’s duty to anticipate changing demands in education and provide opportunities for academic success, employment, and lifelong learning.

The proposed degree in Healthcare Management & Leadership will support the college’s mission by:

- Providing career advancement opportunities to BC and other CTC graduates holding two-year degrees in related areas;
- Opening career advancements for those employed in local healthcare and business fields;
- Offering an entry-level credential in the rapidly diversifying field of healthcare management.

Bellevue College continues to be rooted in the basic mission of a community college: to be an open-door institution that provides educational access to its constituents and serves the varying educational needs of its community. The Healthcare Management & Leadership degree minimizes admission criteria to the essential elements that will ensure students are well prepared to begin bachelor studies, regardless of the origin of their preparation. In addition, this new degree provides a viable pathway to a bachelor’s degree to help students be more employable.

Support of statewide strategic plans

The BAS in Healthcare Management & Leadership supports the goals outlined in the State Board for Community and Technical Colleges (SBCTC) Mission Study and the Washington Student Achievement Council Education Roadmap. Both plans identify strategies to increase the number of baccalaureate educated adults as a means to strengthen the economy and serve workforce needs for more highly educated “locally grown” workers that will:

Bellevue College statement of need: BAS in Healthcare Management & Leadership
• Strengthen state and local economies by meeting the demands for a well-educated and skilled workforce;
• Achieve increased educational attainment for all residents across the state;
• Use technology, collaboration and innovation to meet the demands of the economy and improve student success.

Development of a baccalaureate level Healthcare Management & Leadership degree also aligns with Washington State’s goal of increasing the total number of applied baccalaureate degrees to 1400 annually, thereby contributing to the state’s larger goal of awarding a total of 42,400 baccalaureate degrees by 2019. Since a baccalaureate degree is fast becoming the standard for entry-level positions in healthcare management, this degree is a fitting choice for Bellevue College, building upon the college’s expertise in health science programs. The addition of this degree will provide students another outstanding educational choice in a high growth, high demand field.

Employer and community demand

Bellevue’s unique position

Bellevue College is located within the Bellevue city limits on the central east side of Lake Washington. The land around Puget Sound is the most highly and densely populated area of Washington State, home to more than 50% of the state’s population. Five cities of over 100,000 exist within a 30 mile radius of main campus: Bellevue (133,992), Everett (15,371), Kent (124,435), Seattle (652,405) and Tacoma (203,446).

New census data shows the Seattle-Tacoma-Bellevue metropolitan area added 57,000 residents between 2010 and 2013 and remains the nation’s 15th-largest metro area, with 3.61 million residents. Not only will this new degree provide companies opportunities to employ newly trained health management professionals, but it will also expand options and pathways for community college students in this area where more than 50% of the state’s population resides and where the annual job growth is the fastest in the state.

Situated on the central east side of Lake Washington amidst a growing population and surrounded by small and large companies, Bellevue College’s location positions it well for a new applied bachelor’s degree in Healthcare Management & Leadership. The fact that the degree is expected to be offered through an entirely online and distance-based format further expands its potential to serve place-bound students throughout the state and beyond.

………………

1 quickfacts.census.gov/qfd/states/53000.html 2013 estimates
2 http://blogs.seattletimes.com/fyi-guy/2014/05/22/census-seattle-is-the-fastest-growing-big-city-in-the-u-s/
Bellevue College statement of need: BAS in Healthcare Management & Leadership
Labor Market Data
Bellevue College used several tools and datasets to capture a complete picture of demand. The college assessed current and projected employer demand for similar roles through:

- Regional employment and graduation data through Economic Modeling Specialists International (EMSI) reports;
- Local and regional employment projections through Bureau of Labor Statistics data;
- Current job postings through indeed.com;
- Interviews with employer representatives.

Employment projection data for Healthcare Management careers were obtained from the following sources:

- Regional employment data through Economic Modeling Specialists International (EMSI) reports www.economicmodeling.com
- Local and regional employment projections from the Washington State Employment Security Department fortress.wa.gov/esd/employmentdata/
- Current job postings from indeed.com www.indeed.com

US Bureau of Labor Statistics (Nationwide)

<table>
<thead>
<tr>
<th>Quick Facts: Medical and Health Services Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012 Median Pay</td>
</tr>
<tr>
<td>Entry-Level Education</td>
</tr>
<tr>
<td>Work Experience in a Related Occupation</td>
</tr>
<tr>
<td>On-the-job Training</td>
</tr>
<tr>
<td>Number of Jobs, 2012</td>
</tr>
<tr>
<td>Job Outlook, 2012-22</td>
</tr>
<tr>
<td>Employment Change, 2012-22</td>
</tr>
</tbody>
</table>
Salary for Health Services Manager in Washington

<table>
<thead>
<tr>
<th>health services manager in Washington</th>
<th>$62,000</th>
<th>In USO as of Jul 13, 2012</th>
</tr>
</thead>
</table>

Average health services manager salaries for job postings in Washington are 5% lower than average health services manager salaries for job postings nationwide.

State and National Trends

<table>
<thead>
<tr>
<th>United States</th>
<th>Employment</th>
<th>Percent Change</th>
<th>Projected Annual Job Openings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2022</td>
<td></td>
</tr>
<tr>
<td>Medical and Health Services Managers</td>
<td>315,500</td>
<td>388,800</td>
<td>+23%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Washington</th>
<th>Employment</th>
<th>Percent Change</th>
<th>Projected Annual Job Openings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2012</td>
<td>2022</td>
<td></td>
</tr>
<tr>
<td>Medical and Health Services Managers</td>
<td>7,870</td>
<td>9,480</td>
<td>+21%</td>
</tr>
</tbody>
</table>

1Projected Annual Job Openings refers to the average annual job openings due to growth and net replacement.

Employment of medical and health services managers is projected to grow 23 percent from 2012 to 2022, much faster than the average for all occupations. As the large baby-boom population ages and people remain active later in life, the healthcare industry as a whole will see an increase in the demand for medical services. This demand will in turn result in an increase in the number of physicians, patients, and procedures, as well as in the number of facilities. Managers will be needed to organize and manage medical information and staffs in the healthcare industry. There will likely be increased demand for nursing care facility administrators as baby boomers age.
Employment is projected to grow in offices of health practitioners. Many services previously provided in hospitals will shift to these settings, especially as medical technologies improve. Demand in medical group practice management is expected to grow as medical group practices become larger and more complex.

**Economic Modeling Specialists International (EMSI)**
The EMSI occupation report for Medical and Health Services Managers indicates that in 2014, 31% of the jobs required a bachelor's degree and 61% required a bachelor's degree or higher.

<table>
<thead>
<tr>
<th>Education Level</th>
<th>2014 Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school diploma</td>
<td>0.9%</td>
</tr>
<tr>
<td>High school diploma or equivalent</td>
<td>9.6%</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>16.3%</td>
</tr>
<tr>
<td>Associate's degree</td>
<td>12.7%</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>30.8%</td>
</tr>
<tr>
<td>Master's degree</td>
<td>22.8%</td>
</tr>
<tr>
<td>Doctoral or professional degree</td>
<td>6.9%</td>
</tr>
</tbody>
</table>

**Washington State Employment Security**
Washington State Employment Security Office (WA ESD) reports Medical and Healthcare Services Managers as “in demand” both in Washington State and in King County with an estimated average annual job openings of 168 in King County. At the same time, the number of graduates with a bachelor’s degree in the health management in King County during the AY 12-13 was 41. Clearly a gap exists between bachelor level graduates and job demand.

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>King County</td>
<td>3,509</td>
<td>1.9%</td>
<td>4,236</td>
<td>168</td>
<td>41</td>
</tr>
<tr>
<td>WA State</td>
<td>7,868</td>
<td>1.9%</td>
<td>9,497</td>
<td>371</td>
<td>324</td>
</tr>
</tbody>
</table>
Job postings through indeed.com
Employer demand as well as the supply gap data can also be seen in a momentary snapshot of employment on any given month.

In February 2015, there were 2,797 job postings on indeed.com for Healthcare management positions within 25 miles of Bellevue, WA. Indeed.com is an employment meta-search engine for job postings online.

Not only is this snapshot data an indication of the current demand for Health Management positions, but also the data shows jobs within the region exceeding the current volume of annual graduates in health related fields.

Input from local employers
Medical and health services managers are “in demand” in King, Pierce and Snohomish counties as well as throughout the state of Washington. In conversations with two large local medical employers in 2012, Swedish Health Services and Overlake Hospital, hiring authorities noted a need for baccalaureate educational opportunities in two particular categories. The first was for continuing education for current employees who do not possess a bachelor's degree, but who have risen, or have the potential to rise to supervisory roles. Here, hiring authorities contended that two year degree employees of all kinds - catheterization technicians, surgical technicians, respiratory therapists, occupational therapy assistants and physical therapists assistants - who had assumed supervisory roles would not only benefit from baccalaureate level management courses, but also would likely be expected to obtain the baccalaureate degree. The second was for managers of outpatient clinics, administrative services and free-standing single service centers. Here, hiring authorities suggested a bachelor degree was necessary. One hiring manager noted that for these types of roles, a graduate of a four year management degree with some familiarity with healthcare would make a good candidate.

Summary of industry interviews
In addition to research on job projections, Bellevue College conducted in-depth interviews with two healthcare industry representatives to assess the local market for healthcare management professionals at the bachelor degree level. The interviews occurred in February 2015.

Bellevue College statement of need: BAS in Healthcare Management & Leadership
The industry representatives that were interviewed not only responded positively toward Bellevue College’s ability to offer a BAS degree in Healthcare Management & Leadership, but also indicated a growing consensus among healthcare providers that healthcare managers need a bachelor’s degree at the entry and middle-level positions. In addition, these representatives stated that employers face continual difficulty recruiting employees with the requisite experience and minimum educational requirements. Employers interviewed were in agreement that a graduate from an applied baccalaureate program would bring applicable skills to their employer, reducing turnover rate and the related costs of replacing employees (see Appendix A for complete responses).

As a matter of full-disclosure, question 6 of the industry interviews requires additional clarification.

The question asked “When hiring healthcare managers at this level, do you have difficulties finding professionals with the desired skills and knowledge?”

A particular respondent to this question, Jim Sapienza, answered: “Yes. There is a glut of skilled clinical people who could be managers. However, their traditional AA and BS degrees do not give them the formal training to be solid and competent in management.”

Unclear in Mr. Sapienza’s original response is whether he preferred the development of a new bachelor degree program or preferred improving existing AA and BS programs to find employees with the desired skills and knowledge.

Bellevue College reached out to Mr. Sapienza for clarification. In this conversation, he confirmed that a new program focused on management skills within the context of a healthcare program would be best. His response corroborates the data provided by the Bureau of Labor statistics on projected change in employment. In comparison to all occupations in general and to management occupations in particular, demand for medical and health service is projected to grow 23%. This is considerably higher than all occupations in general, projected to grow (11%) and management occupations in particular, projected to grow only (7%). (See chart on page 9)

In sum, the comments of both survey respondents supported the development of a new healthcare management & leadership program. Further, they confirmed the fact that need for healthcare management baccalaureate degree graduates will continue to grow over the next 5 years.

“*My perspective is that entry and mid-level managers are in increasing demand. My organization has a need every year to hire competent, trained healthcare management professionals*”

-Jim Sapienza, Chief Administrative Officer
- West Valley Hospital at Salem Health
Support from the Healthcare Management Advisory Committee

In 2013, Bellevue College established a joint advisory committee in Healthcare Management. This committee, comprised of healthcare professionals from a broad range of backgrounds, including professionals from the Washington chapter of the American College of Healthcare Executives (ACHE), was specifically created to guide the management concentrations of the HCTM and RAIS BAS programs.

This committee convened on November 6, 2013 and was presented with Bellevue College’s initial proposal to combine the existing management concentrations under a singular degree title. The committee discussed and supported renaming a standalone degree in Healthcare Management & Leadership. They agreed that inception of a new healthcare management & leadership program would clarify for employers exactly what educational background graduates would bring to the workplace. The advisory committee met again on March 13, 2014 at which time they formally recommended that Bellevue College move forward in seeking approval for the new Healthcare Management & Leadership degree from the State Board of Community and Technical Colleges. Minutes from these meetings have been attached as Appendix B.

Conclusions from labor market and employer data

Based on local job postings, employer interviews, local and state employment projections, and industry interviews, it is clear that there is a strong need for healthcare managers with applied skills and a bachelor’s degree. The proposed bachelor of applied science in Healthcare Management & Leadership aligns well with this growing workforce need by integrating management theory and practice with the abilities of critical thinking, problem solving, organizational development, collaboration, and communication.

Strong foundation built on existing programs

Feeder programs at Bellevue College

The new Healthcare Management & Leadership degree will admit students from two feeder associate’s degree pathways – health-care related programs and business programs.

Bellevue College offers several associate degree programs in the field of health science. They include Diagnostic Ultrasound, Neurodiagnostic Technology, Nuclear Medicine Technology, Nursing, Radiation Therapy and Radiologic Technology. The college also offers entry-level healthcare certificates in the following specializations: Clinical Lab Assistant, Emergency Department Technician, Health Unit Coordinator, Nursing Assistant Certified, and Phlebotomy Technician. These certificates often lead students to advance into the two-year Allied Health (AAS-T) degree.

In addition to these health science degrees and certificates, Bellevue College offers several associate degree programs in business that transition well into a healthcare management &
Graduates from both the healthcare and the management degree pathways possess strong foundational skills and knowledge from which to begin and thrive in a healthcare management baccalaureate program.

Collaboration and synergies with existing BAS degrees at Bellevue College

The new BAS in Healthcare Management & Leadership is built upon courses that have already been developed and taught for the existing BAS degree concentrations in Healthcare and Radiation and Imaging management. These courses are shared between the two student populations to leverage instructor resources, ensure strong course enrollments, and expand availability of core courses throughout the year.

Student demand

Healthcare management degree addresses current student needs

Bellevue College’s proposed BAS in Healthcare Management & Leadership is designed to meet the current and future needs of students pursuing careers as health services

Bellevue College statement of need: BAS in Healthcare Management & Leadership
managers. The degree will provide a pathway to the baccalaureate for students with two-year technical degrees in healthcare or business programs statewide. Currently the pathway to the bachelor’s degree in healthcare management for graduates with professional or technical degrees is limited. Students who earn the Associate of Applied Science degree at a community or technical college cannot transfer to public universities such as UW, EWU, or CWU without taking additional course work or completing the Associate Transfer degree. This new BAS degree provides an immediate pathway to the bachelor’s degree for students with the two-year technical degree in healthcare or business who wish to advance to a healthcare management position.

In addition, professionals who work in clinics, hospitals, or as healthcare administrators, but do not have a bachelor's degree, will have the opportunity to earn their degree while simultaneously broadening and deepening their skills. As noted in the original proposals for the BAS in Healthcare Technology & Management program (2011) and for the BAS in Radiation and Imaging Sciences program (2005), hospitals and clinics now require employees more often than not to enter their positions with bachelor’s degree. This is particularly true for positions in management and leadership which often mandate a bachelor’s degree as the minimum educational qualification.

Completion rates for healthcare- and business-related programs in our local area show a strong pool of two-year graduates who would be qualified to progress into a BAS degree in Healthcare Management & Leadership.

<table>
<thead>
<tr>
<th>Two-year Degree Completers in Healthcare- and Business-related programs*</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bates</td>
<td>132</td>
<td>131</td>
<td>129</td>
<td>157</td>
</tr>
<tr>
<td>Bellevue College</td>
<td>200</td>
<td>224</td>
<td>224</td>
<td>197</td>
</tr>
<tr>
<td>Bellingham Tech College</td>
<td>115</td>
<td>179</td>
<td>179</td>
<td>169</td>
</tr>
<tr>
<td>Clover Park Tech College</td>
<td>150</td>
<td>154</td>
<td>154</td>
<td>81</td>
</tr>
<tr>
<td>Everett Community College</td>
<td>192</td>
<td>208</td>
<td>203</td>
<td>237</td>
</tr>
<tr>
<td>Edmonds Community College</td>
<td>83</td>
<td>92</td>
<td>92</td>
<td>99</td>
</tr>
<tr>
<td>Green River Community College</td>
<td>164</td>
<td>170</td>
<td>168</td>
<td>134</td>
</tr>
<tr>
<td>Highline College</td>
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<td>183</td>
<td>179</td>
<td>144</td>
</tr>
<tr>
<td>Lake WA Institute of Technology</td>
<td>234</td>
<td>222</td>
<td>221</td>
<td>226</td>
</tr>
<tr>
<td>Olympic College</td>
<td>166</td>
<td>171</td>
<td>171</td>
<td>169</td>
</tr>
<tr>
<td>Peninsula Community College</td>
<td>57</td>
<td>68</td>
<td>68</td>
<td>58</td>
</tr>
<tr>
<td>Renton Technical College</td>
<td>118</td>
<td>129</td>
<td>129</td>
<td>146</td>
</tr>
<tr>
<td>Seattle Central</td>
<td>112</td>
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<td>107</td>
<td>110</td>
</tr>
<tr>
<td>Seattle North</td>
<td>145</td>
<td>110</td>
<td>108</td>
<td>107</td>
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<tr>
<td>Seattle South</td>
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<td>49</td>
<td>48</td>
<td>34</td>
</tr>
<tr>
<td>Shoreline Community College</td>
<td>208</td>
<td>195</td>
<td>195</td>
<td>202</td>
</tr>
<tr>
<td>Tacoma Community College</td>
<td>221</td>
<td>264</td>
<td>264</td>
<td>279</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2523</td>
<td>2656</td>
<td>2639</td>
<td>2549</td>
</tr>
</tbody>
</table>

Bellevue College statement of need: BAS in Healthcare Management & Leadership
Current program enrollments and student inquiries
Since this new degree will be comprised of existing management concentrations within the Healthcare Technology & Management and Radiation and Imaging Science BAS degree programs, Bellevue College believes it useful to supplement student demand data with current enrollment data in each of its healthcare management concentrations over the past five years as well as with recent prospective student inquiries. These enrollments and inquiries are strong indicators of demand for this new Healthcare Management and Leadership BAS program.

Current program enrollments
The table below provides enrollment numbers over the last five years for both healthcare management degree concentrations. The combined enrollment of both concentrations is currently 45 students. We anticipate that enrollment should reach capacity at 60 students by the end of 2017. The initial high enrollments (2010-2012) were the result of pent up demand for the BAS degree by workers employed in imaging sciences industry.

<table>
<thead>
<tr>
<th>Year</th>
<th>Management concentration; BAS in Radiation &amp; Imaging Sciences</th>
<th>Healthcare management concentration; BAS in Healthcare Technology &amp; Management</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11</td>
<td>87</td>
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<td>87</td>
</tr>
<tr>
<td>2011-12</td>
<td>87</td>
<td>N/A</td>
<td>87</td>
</tr>
<tr>
<td>2012-13</td>
<td>29</td>
<td>N/A</td>
<td>29</td>
</tr>
<tr>
<td>2013-14</td>
<td>21</td>
<td>N/A</td>
<td>31</td>
</tr>
<tr>
<td>2014-15</td>
<td>21</td>
<td>10</td>
<td>45</td>
</tr>
</tbody>
</table>

Prospective student inquiries
Since January 2014, a total of 117 students have contacted Bellevue College to inquire about enrollment in the existing management concentrations of the Healthcare Technology & Management and Radiation and Imaging Science BAS degrees. These inquiries demonstrate a strong interest from the local community in health degree programs in general and for development of a new healthcare management & leadership BAS degree in particular.
Maximizing state resources

Bellevue College’s bachelor’s degree in Healthcare Management & Leadership will augment the knowledge students have gained through their associate degrees and will provide a solid foundation in general education and advanced skills targeted to the specific needs of the healthcare management setting. It will provide students the opportunity to earn an affordable bachelor’s degree focused on the knowledge and technical skills employers are seeking.

The program will increase the number of overall bachelor’s degree holders in the state by providing opportunity for advancement for professional and technical associate degree holders who are otherwise limited in pursuing a bachelor’s degree. It will also provide opportunities for place-bound students interested in a career in healthcare management.

The degree has been designed with working adults in mind. Classes will be offered online or by synchronous distance education to maximize flexibility in scheduling and access for place-bound and/or working students. In addition to providing access and convenience for students, online and synchronous distance classes allow more efficient use of resources such as classroom space, allowing more students to be served without requiring as many physical resources.

Bellevue College will be offering this degree on a self-support model, thus further maximizing limited state resources. Based on the number of graduates from existing BAS programs, we project that the program will be at full capacity within one year of the initial year of operation, and that by its fourth year of operation, the proposed BAS in Healthcare Management & Leadership will produce a minimum of 30 graduates each year to help meet projected high growth and high vacancy rates.

Opportunities for collaboration

Bellevue College works closely with our CTC system partner colleges to provide smooth transitions for two-year technical degree graduates who wish to enter a baccalaureate program. During the next year, the program will pursue opportunities to develop articulation agreements with system colleges so that students graduating from healthcare- or business-related programs who wish to go on to the baccalaureate will have a clear pathway into the Healthcare Management & Leadership degree.

Bellevue College representatives have already begun connecting with several two-year and four-year healthcare management related programs in Washington State to assess the interest of two-year potential feeder programs into the new BAS degree, and the possibility of collaboration with existing four-year programs. Relationships have already been established for graduates to continue on to master’s level studies at the University of Washington. In fact, several graduates from the Management concentration for the BAS in Radiation and Imaging Sciences have successfully transferred and completed the Master’s
in Business Administration (MBA), the Master’s in Healthcare Administration (MHA) and the Master’s in Public Health (MPH). Bellevue College will continue to work with colleges and universities to ensure that students who complete the college’s existing applied baccalaureate degrees have options to continue to graduate school if they want to pursue further education.

Collaborations have also started with the Columbia Basin’s BAS degree in Applied Management which includes a healthcare management component. Their proposed degree concentration is expected to be primarily campus-based with similar course content. Both programs agree to collaborate on efforts to identify common courses that could be transferable between institutions. As an online degree option, students from CBCC may also be able to register for HCML courses if they are unable to attend the campus-based versions thus supporting persistence for their graduates. The same could apply to students enrolled in the HCML degree that live in Eastern Washington who are seeking additional course options to enhance their educational plan.

Unique aspects of proposed program and differences with similar degrees
Bellevue College’s BAS in Healthcare Management & Leadership will be different from traditional four year college degrees in several aspects:

- A large number of community college students enrolled in two-year healthcare- or business-related degrees are in their 30’s or older. They work and/or have family obligations. The BAS will offer the flexibility of modalities that meet the specific needs of students who cannot easily attend traditional classes. These modalities include fully online and synchronous distance delivery

- The BAS program is built to offer a balance of theory and practice where students apply what they learn in a project-based environment that emulates the workplace. This facilitates students’ transition into employment and make graduates more efficient once they enter healthcare organizations.

- In addition to healthcare management knowledge and skills, employers look for candidates that can demonstrate strong “soft” or general employability skills. The BAS program will emphasize these skills – specifically communication, intercultural communication, teamwork, and project management skills - by integrating them into healthcare management courses directly.

- While two-year graduates from professional/technical degrees often are limited in their options for advanced education, the BAS degree will be designed specifically to meet the needs of these graduates through articulations with existing two-year degrees throughout Washington State.

Bellevue College statement of need: BAS in Healthcare Management & Leadership
Our research shows that the University of Phoenix and Capella University both offer online baccalaureate programs with a focus in healthcare management. Tuition at these institutions is significantly higher than baccalaureate tuition at BC.

The University of Washington offers a highly respected public health program which includes a management focus. This program is not available for transfer students with professional technical degrees.

The University of Washington, Tacoma also offers a Healthcare Leadership BA Program which requires 55 credits, including a foreign language, for admission. Students from professional or technical programs would also need many additional courses from the 100 and 200 level in order to meet these requirements. In addition, all of their courses are offered on campus which would not serve distance-based students. The Bellevue College HCML program would allow students that have completed the coursework through an associates or certificate program to transfer their lower level courses to BC. Students from a technical associates or certificate program are also able to meet the prerequisites for our program.

The University of Washington, Bothell offers a BA in Health Studies with a Leadership concentration. The UW program, however, is more theoretical and less applied than BC’s proposed program. Courses in the UW program range from environmental justice to gender in science to public policy and law. Management courses are a small portion of the total requirements. The BC HCML program, on the other hand, requires 80 credits (16 courses) that focus specifically on healthcare leadership and management. The BC program is designed to prepare individuals to successfully compete for jobs that require practical, applied knowledge of the healthcare system as well as of knowledge of management and employee supervision.

Eastern Washington University also offers a BA in Health Services Administration. Although this program appears similar to the BC HCML program, it requires students to select concentrations in aging, social work, planning, HR and IR. The BC HCML program offers students a broader focus on healthcare management and leadership. In addition, the EWU program requires one year of a foreign language, similar to the UW programs. Again, this is not required with the BC program.

To summarize, the Bellevue College HCML program affords a 2 + 2 model where transfer students with a healthcare or business associate technical degree, or equivalent may be immediately eligible for admission. What’s more, students who hold professional/technical degrees can finish their bachelor’s degree in less time and at less cost. Finally, BC’s program emphasizes applied rather than theoretical education. All courses in the BC
program are designed to help students become effective managers and leaders in the healthcare field.

**Conclusion**

Bellevue College looks forward to speaking with SBCTC system trustees about our plans for an applied baccalaureate in Healthcare Management & Leadership. We are excited about this opportunity to reorganize what are already outstanding degree concentrations under a clearer and more focused Healthcare Management & Leadership degree.
Appendix A – Industry Interview Questions and Responses

Industry Respondents:
- Jim Sapienza, Chief Administrative Officer - West Valley Hospital at Salem Health
- Daron Vchulek, Vice President of Ancillary Services, The Polyclinic

Local and national data appear to indicate that hiring for medical and health services managers is increasing and that demand for these roles will continue.

1. From your perspective, is this data accurate? Are these positions in demand? Will your organization have a need to hire healthcare management professionals?

**Jim Sapienza** – My perspective is that entry and mid-level managers are in increasing demand. My organization has a need every year to hire competent, trained healthcare management professionals.

**Daron Vchulek** – Yes, as the aging baby boomers move to an age that is disproportionally impacted by disease and cancer, there will be a greater demand for medical and health services which will require an increase in management positions. Also, the Puget Sound area has seen an increase in imaging and medical facilities in suburban areas as population growth continues to increase. This increase in healthcare centers outside of the Seattle-Bellevue metro areas has increase the number of management demand as well.

2. For what types of management positions would you hire graduates from a healthcare management baccalaureate degree? Assuming no or little industry experience (less than 6 months industry management experience). What size/type of units?

**Jim Sapienza** - Without any experience managing people and less than 1 year of experience, the types of entry level roles include Project Management, Process and Quality Improvement leaders, and finance or operations analysts. Operations, finance, HR, Quality, contracting, IT. Typically units of 5-30 people.

**Daron Vchulek** – Very few, the one exception would be in Healthcare IT. All other management positions would need some type of experience in the healthcare field along with a baccalaureate degree before being considered for a position in healthcare management.

3. How specialized do you prefer training to be for managers of your specialized units? For example, if someone is managing a radiation oncology unit, how much specialized training would you want them to have?

**Jim Sapienza** – Many healthcare hiring directors want to hire people who have already done the job. I prefer to hire people who proved in their current job or academic program that they have prepared for the next job. I do not prefer specialized training, but general skill sets that can be applied to any healthcare management position.
Daron Vchulek – A manager of a specialized unit such as Radiation Oncology would need to have a few years’ experience in their specialty as a radiation therapy technologist or dosimetrist as well as a bachelor degree related to healthcare management.

4. Do you primarily promote internal candidates into management positions, or hire from outside, or both?

Jim Sapienza – I always look to balance the team with both internal and external hires.

Daron Vchulek – We hire both from within and also outside depending on the experience and academic backgrounds of the candidate.

5. Are you willing to hire managers from a generic business management degree with no or little knowledge/experience in the healthcare sector?

Jim Sapienza – I will accept the business management degree, but I also want to see commitment to the healthcare industry through past jobs, volunteering, internships, etc. Healthcare is complex and not the highest-paying industry (although Techs and RNs and MDs are well paid) for management. Many Techs and RN’s take pay cuts to go into management.

Daron Vchulek – It would be an extremely rare case if we did. I have not seen this in the past with the exception of a Chief Financial Officer.

6. When hiring healthcare managers at this level, do you have difficulties finding professionals with the desired skills and knowledge?

Jim Sapienza – Yes. There is a glut of skilled clinical people who could be managers. However, their traditional AA and BS degrees do not give them the formal training to be solid and competent in management.

Daron Vchulek – Unfortunately, we have had openings in the past where no one applying meets our criteria for the management position. I have also had occasions when we have had internal candidates who meet the experience qualification but lack the academic portion and we felt strongly about not advancing these candidates without the proper education.

7. Do you see the need for graduates of a healthcare management baccalaureate degree growing in the next 5 years?

Jim Sapienza – Yes.

Daron Vchulek – Easily. And in the next five years, managers will be required to have a Masters level degree (MHA or MBA with a healthcare undergraduate degree)

8. In your opinion, would there be a benefit for Bellevue College to offer a four-year applied baccalaureate program in Healthcare Management? If so, what are the main benefits in your opinion?

Jim Sapienza – Yes. The main benefits would be to a. train the available workforce in skills that are needed in the healthcare workplace, b. create a supply to meet demand, and c. to fill that unmet need.
_Daron Vchulek_ – Yes. Having a candidate who understands leadership, healthcare marketing and finance, and has a higher understanding of healthcare economics and ethics are the reasons we will not hire a leader without a bachelor degree in healthcare management.

9. Would you or others at your organization be willing to participate in a more detailed survey to help us fully understand the level and type of training you prefer for healthcare managers?

_Jim Sapienza_ – Yes.

_Daron Vchulek_ – Of course.
Appendix B – Healthcare Management Advisory Minutes

November 6, 2013
6:30pm – 7:30pm
Bldg B201b- East Board Room

Voting Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daron Vchulek</td>
<td>V.P. of Ancillary Services</td>
<td>Polyclinic</td>
</tr>
<tr>
<td>Kimbra Wells Metz</td>
<td>Principal</td>
<td>EDGE Healthcare Consulting</td>
</tr>
<tr>
<td>Jennifer Beals</td>
<td>Leadership Development, MHS Founder &amp; Principal Consultant</td>
<td>Eclipse Coaching &amp; Consulting, LLC</td>
</tr>
<tr>
<td>Jim Sapienza</td>
<td>Administrator and Co-leader of Lean Implementation</td>
<td>Multicare Health System</td>
</tr>
</tbody>
</table>

Non-Voting Members

<table>
<thead>
<tr>
<th>Name</th>
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<td>Adjunct Instructor</td>
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Meeting was called to order at 6:35pm. As this was the inaugural convening of the committee, Maurya Radvilas volunteered to serve as interim chairperson. Maurya provided general introductions and then invited each committee member to share some information about themselves and the outcomes they would like to see in participating in the committee.

Program issues/discussion
Maurya presented a brief overview of BC’s current BAS degree concentration in Healthcare Management which started this past fall 2013. Committee members were provided with a BAS degree worksheets as well as learning outcomes for both the Healthcare Management

Bellevue College statement of need: BAS in Healthcare Management & Leadership

24
and Radiation and Imaging Management degree concentrations for comparison.

Kim shared information on the current cohort of students in the BAS degree noting that the student audience has been predominantly students with varied healthcare backgrounds including Dental. The program currently has five students and accepts new students every quarter.

Maurya shared proposed changes to the organizational structure for the Healthcare Management Degree concentration. To reduce confusion for students and employers the Healthcare Technology and Management and Radiation and Imaging Sciences programs would like to propose that the existing Management tracks in both programs be separated out into their own degree in Healthcare Management and Leadership. No changes would need to be made the degree plans and course listings themselves it would simply be a relabeling the degree more accurately. A copy of the proposed change was presented to the committee for feedback. They committee did not see any objections to the renaming of a standalone degree in Healthcare Management and did confirm that the name change would make it easier for employers to understand more clearly what the student's educational background was. One consideration to explore further would be whether or not a generalized degree might be a hindrance to those interested in specialized manager positions (i.e. nurse managers, imaging managers) who may prefer that their degree be more specialized.

**Curriculum issues/discussion**

After reviewing the curriculum for the program, Kimbra asked for clarification on the specific roles/job titles the program was aligned to prepare students for. Any additions/changes to the existing curriculum should really start with reverse engineering the degree based on specific roles that they would fulfill rather than the other way around. The consensus was that the program could prepare students for positions in middle management. This opened up discussion amongst the larger group around what the specific types of skills hiring officials are looking for in middle managers. Finance and accounting, marketing strategy, HR labor relations were all listed as highly important.

Jennifer saw a huge need for an understanding of day to day operations at point of hire. She currently sees folks with heavy change management and leadership knowledge and skills but little in terms of operational effectiveness and pushing/moving metrics forward in an organization. In response to this comment Jim suggested exploring a possible program management certificate that could properly address operations/operations management. More research will need to be done in this area in terms of either incorporating into existing courses as a focus or creating a certificate option in this area.

Other recommendations for preparation included:
- recognizing how to transition from individual contributor to leader
- owning a problem and leveraging resources around it
• analysis-beyond just interpreting it but knowing the decisions to make with it
• everyone is now requiring Lean. Six Sigma is even becoming a requirement for those entering leadership roles

The committee suggested using a competency-based approach to future program development. Assigning targets for competency as students learn to move from individual contributor to manager to leader.

In preparing students for entry into healthcare management after graduation the committee suggested helping students to prepare for the interview process with behavior-based questions.

Once graduates land positions the following are key pieces of advice for continued success:
• demonstrate confidence around knowledge
• have flexibility
• understand systems thinking
• be able to communicate
• know how to ask the questions that can move them forward

In order to successfully transition students also need to be willing to get in somewhere for the experience less so for the salary particularly if they have never held a management position before.

It was noted that the current bachelor’s degree curriculum as it exists sounds like it would assist students very well with entry into management however in order to continue to grow down this path eventually a Master’s would be necessary. Awareness of this fact was indicated as highly important in advising students into the program.

Related to student audience for degree, the committee suggested that marketing be focused on the value proposition. Reverse engineer by looking at the particular people who would benefit most from this type of degree and get to value-add from that direction.

Discussion related to a potential certificate option in Healthcare management was tabled for a future meeting.

**Jobs/Industry Trends issues/discussion**
Daron pointed out that there are hourly wage employees throughout healthcare roles at the tech level which means that management positions tend to accompany a step-down in pay. Currently individuals are not incentivized to want to make that move. He felt this was an important dynamic to consider in terms of preparing individuals to make the transition. Passion needs to be the key consideration point. Other committee members agreed and transparency is best option

Bellevue College statement of need: BAS in Healthcare Management & Leadership
In looking at the existing workforce the committee agreed that the addition of a healthcare management certificate would be more apt for those interested in getting jobs within the clinic setting.

**Advisory Committee issues/discussion**
Maurya also expressed the importance of maintaining an industry advisory committee and explained the function and level of participation it would entail. Committee members were asked to pass along recommendations for additional members to represent from industry. Maurya will reach out to committee members to follow-up.
The meeting ran longer than the one hour time frame so it was recommended that future advisory committee meetings anticipate a 1.5 hour meeting time instead.

**Action Items**
- Next meeting date and location are to be determined.
- Provide scenarios to advisory committee members for proposed HCM certificate prior to next meeting.
- Submit request for proposed change to degree organization

Meeting was adjourned at 7:50pm.

**Minutes Submitted by: Kim Hassell**
March 13, 2014
6:00pm – 7:30pm
Bldg B201b- East Board Room

Voting Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
<tr>
<td>Daron Vchulek</td>
<td>V.P. of Ancillary Services</td>
<td>Polyclinic</td>
</tr>
<tr>
<td>Jim Sapienza</td>
<td>Administrator and Co-leader of Lean Implementation</td>
<td>Multicare Health System</td>
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Non-Voting Members

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<tr>
<td>Leslie Heizer-Newquist</td>
<td>Dean</td>
<td>Health Sciences, Education and Wellness Institute, Bellevue College</td>
</tr>
<tr>
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Meeting was called to order at 6:04pm. Maurya introduced Leslie Heizer-Newquist who is the new dean for the Health Sciences, Education and Wellness Institute. The agenda for the meeting was review and accepted by the group with one additional agenda item: Technology support for program faculty with a specific focus on use of Canvas.

Program issues/discussion

Current enrollment-The management track for Radiation and Imaging Sciences has a total of 17 current/new students enrolled in classes for winter quarter, the new Healthcare Management track has accepted 10 new students since it started in fall 2013. Marketing for the program has been held back due to the confusion that the name presents. With the current degree title of Healthcare Technology and Management many students have difficulty interpreting that the Management portion of the degree is separate from the technology piece. The program is looking to move forward with a State Board proposal to get the name modified.

Bellevue College statement of need: BAS in Healthcare Management & Leadership
Student Profile: The student profile for the HCTM Management Concentration tends to be a younger student with little to no practical experience working in healthcare. This has changed the way in which instructors approach the material in their courses. They have not been able to rely on student’s own previous knowledge and experience to help inform their understandings in the course. Maurya found this to be a strength in classroom discussions as it meant that students were less likely to be wedded to previous expectations and understanding around the healthcare environment. The varying perspectives of the students actually enriched the discussions in courses where there was a mixture of students who have solid healthcare experience and those who do not. One positive result has been increased peer-to-peer support; students are now relying on each other more.

Program direction/challenges: Leslie provided a status update for the proposed name change to the program. BC has been ahead of the curve in developing successful BAS programs. Unfortunately it has also been moving slightly quicker than the state board has been able to figure out clear processes for approving alterations/modifications to existing BAS programs. Leslie has spoken with representatives from the State Board who agree that the proposed name change is more of a reshuffling of existing programs rather than a significant change. There may be a quite a wait though before they will be able to review and develop a new process for approval of our change. The State Board is experiencing a huge ramp up of new BAS programs that are awaiting approval.

Curriculum issues/discussion

Consideration of certificate options: The previously tabled topic of potential certificate options in Healthcare Management was discussed. Maurya and Kim researched existing Healthcare Mgmt certificates offered at other universities in order to help clarify who the potential audiences for a certificate would be:

- Physicians, nurses, physicians’ assistants, therapists, laboratory technicians, social workers, and other healthcare professionals who have recently been promoted or accepted a position as a manager or supervisor.
- Current managers or supervisors in healthcare settings, such as hospitals, physicians’ offices, rehabilitation centers, etc.
- Healthcare systems looking to provide cost-effective training opportunities to supplement an internal training agenda or professional development plan or
- Managers and supervisors in other fields seeking to enter the Healthcare profession

The types of certificates and levels of education varied. The University of Georgia offers a self-paced training as continuing education, UCLA offers a certificate at the undergraduate level, and the University of Vermont has their certificate placed at the graduate level. Examining the topics and courses offered in each these certificates the following themes emerged:

- Legal & Regulatory
- Management & Leadership
- Biomedical Ethics
With this information Maurya presented the committee with a list of the current courses in the BAS degree that align with these themes and would serve well as core courses in a one-year certificate option:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECON 315</td>
<td>Economics of Healthcare</td>
<td>5</td>
</tr>
<tr>
<td>RAIM 325</td>
<td>Organizational Theory and Behavior in Healthcare</td>
<td>5</td>
</tr>
<tr>
<td>RAIM 320</td>
<td>Finance and Accounting for Healthcare Managers</td>
<td>5</td>
</tr>
<tr>
<td>RAIM 350</td>
<td>Legal and Regulatory Aspects of Healthcare</td>
<td>5</td>
</tr>
<tr>
<td>RAIM 460</td>
<td>Management and Leadership in Healthcare</td>
<td>5</td>
</tr>
<tr>
<td>PHIL 365</td>
<td>Biomedical Ethics: Theory &amp; Practice</td>
<td>5</td>
</tr>
<tr>
<td>Plus Electives</td>
<td></td>
<td>15</td>
</tr>
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**Recommendations/Approval for new certificate option**: The committee reviewed the courses listed and, with assistance from faculty in the program, offered a number of recommendations:

- It was agreed that the courses already listed as core were acceptable with one additional course identified as important to include: RAIM 411 – Institutional Quality Management & Accreditation.
- For the electives it was suggested that perhaps students could use those classes to develop an area of emphasis, building on the core with additional courses in Finance/Economics, New business planning, or Marketing. Recommendations for areas of emphasis would then be catered to the specific needs of each student depending on whether they are new managers, have already been in leadership, are looking for business growth or have an interest in entrepreneurship in healthcare.
- The committee was also interested in the idea of creating shorter alternative core sets for specific subject areas such as Human Resources, Organizational Theory, Management & Leadership, Project Management, Quality, Finance and Tactical Management (*how to be a manager*)
- With this idea came the suggestion to examine ways to develop stackable certificate options by establishing different shorter core sets, which would serve as components of a specific emphasis area, then stack additional core sets/electives on top of it to reach 45 credits.

Bellevue College statement of need: BAS in Healthcare Management & Leadership
Another concept would be to simply offer tailored options for varying student populations where students would pick and choose courses currently available in the degree that best suit their needs. (i.e. experienced managers who are looking for big picture and strategy vs. those entering into management that need to understand the basics of being a manager)

Jobs/Industry Trends issues/discussion
Technology support: Jim asked to speak about the technology support needs of the program. The number one issues to address are the use of Canvas as the new learning management system and the multiple modes of teaching being offered to students in the program. This topic is especially important to consider as more and more students in the program attend remotely.
At this point faculty and students in the program are still learning to utilize Canvas to its full potential. Every instructor is using it differently and students have varied levels of equipment and comfort with using Canvas. Aside from online videos and tutorials, IR has begun offering students a more detailed check list of minimum software and hardware requirements they will need to operate Canvas properly as well as the option to remote in to students’ computers for technical support.
Courses offered in a hybrid format pose additional challenges to students and faculty alike as more and more students request to attend the hybrid course’s on-campus discussion remotely. The program currently uses 4 classrooms on campus to host hybrid courses and each room uses different equipment that requires slightly different modifications to make it work for remote attendance. This quarter the program trialed putting work study students in the classroom to support the faculty on ground and assist remote students with navigating the technology on their end. With this came additional support from IR who hosted orientations with students to test out their equipment and make sure they were ready before the start of the quarter. This approach has been successful so far and will continue to serve as a work-around until the new Health Sciences building is up and running. Plans have already been made to ensure better technology/equipment in classrooms in the new building to accommodate courses taught using a remote hybrid model. The program also attempted to split some hybrid courses into two separate sections: offering one section for on-campus participation and another that is fully online. PHIL 365 was one such course that was split into two sections this spring. These conversations will continue to be paramount especially as enrollments in shared courses continue to grow. Currently there are four audiences of students (BSN, HCTM: HIT & HCM, RAIM) sharing a number of courses that are now reaching full capacity and require additional overloads and sections to accommodate. Classes of this size and magnitude do not lend well to the remote hybrid format as they can be too difficult to maintain and can diminish the experience for those students who do still elect to attend in person.

Action Items
- Next meeting date and location are to be determined. Sometime in May possibly.
• Provide scenarios to advisory committee members for proposed HCM certificates.

• Submit request for proposed change to degree name and organization

Meeting was adjourned at 7:30pm.

Minutes Submitted by: Kim Hassell
Bachelor of Applied Science Degree in Operations Management

Statement of Need
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Program Information

Institution Name: Bellingham Technical College

Degree Name: Operations Management

CIP Code: 52.0205

Name(s) of existing technical associate degree(s) that will serve as the foundation for this program:

Degree: Electro Mechanical Technology AAS-T

CIP Code: 15.0403

Year Began: 2007

Degree: Process Technology AAS-T

CIP Code: 47.0396

Year Began: 2004

Proposed Start Implementation Date (i.e. Fall 2014): Fall 2016

Projected Enrollment (FTE) in Year One: 15

at Full Enrollment by Year: 2019

Funding Source:

State FTE: ☒

Self-Support: ☐

Other: ☐

Mode of Delivery

Single Campus Delivery: Yes

Off-site: No

Distance Learning: Yes – program will be hybrid and online

Statement of Need: Please see criteria and standard sheet.
Page Limit: 20 pages

Contact Information (Academic Department Representative)

Name: Darren Greeno

Title: Dean of Professional Technical Education

Address: 3028 Lindbergh Avenue, Bellingham WA 98225-1599

Telephone: 360-752-8331

Fax: 360-752-7131

Email: Dgreeno@btc.ctc.edu

Chief Academic Officer

Date
INTRODUCTION

Bellingham Technical College’s proposal for an applied baccalaureate program in Operations Management has been developed in response to regional and state need within advanced manufacturing industries, and will create a streamlined completion pathway for current employees and two-year associate degree graduates to learn management skills and enhance their career opportunities. The Operations Management program will build on the college’s strong advanced manufacturing program cluster. Graduates from Associate of Applied Science – Transfer (AAS-T) programs such as Electro Mechanical Technology (Mechatronics), Process Technology, and Computer Networking will feed into the proposed BAS degree, and these programs will provide curricular infrastructure upon which to build courses in areas such as system design, quality assurance, logistical planning, lean concepts, and management information systems.

Curriculum development for this BAS degree will rely heavily on strong, existing industry partnerships to provide an industry-driven perspective, help develop training materials and ensure that all training delivered will match clearly identified and understood industry skill demands. The curriculum will focus on practical application of management skills in a variety of areas, including project and production management. Graduates will possess a solid foundation of sought-after technical skills through their work in professional technical associate degree programs, and will gain theoretical and applied understanding of operations management throughout their upper-division coursework. As explained further in Criteria 4, this BAS program will educate students about how to understand, manage, and implement change related to operations and production processes with as few adverse consequences as possible. Student work in the BAS degree will focus on how to problem-solve effectively, manage projects, set up or enhance communications systems and processes, and how to manage team-based work environments—particularly within production environments. The degree will prepare students for employment within a wide variety of manufacturing and other industries. All AAS-T programs that feed into the BAS degree include extensive work in the application of technical skills in the students’ chosen fields. This hands-on technical training, combined with course content in management and other related areas, will enable BAS graduates to meet the growing needs of our employers.

While the local baccalaureate institution, Western Washington University (WWU), has baccalaureate programs such as Manufacturing and Supply Chain Management, students in these programs tend to be recent high school graduates who are able to meet GPA and prerequisite requirements, as well as commit to a baccalaureate program which will typically require at least four years to complete. The majority of students anticipated to enroll in the BAS program at BTC are non-traditional students who have completed related two-year college AAS-T programs. These students will typically have either just completed their AAS-T degrees, or will be former graduates who are now incumbent workers seeking a two-year BAS option to advance their careers. These students will benefit from the flexible hybrid/online delivery model, small class sizes, and strong student support systems of the BAS program.

BTC’s student population includes older students seeking to train or retrain into high-wage, high-demand careers: the median age for a BTC student is nearly 30. BTC is a critical resource for large numbers of first-generation and/or economically disadvantaged students in the region, with low-income students representing nearly 60% of BTC’s population. College data shows that nearly 20% of BTC students have children, and the majority of enrolled students are from Whatcom county and surrounding regions. Student from Whatcom County often have family
connections to the area. BTC’s new BAS degree in Operations Management will create a seamless, 2+2 pathway for place-bound area residents who hold a professional technical associate’s degree but who are unable or unwilling to leave and seek baccalaureate opportunities elsewhere.

The majority of employers in Whatcom County and the surrounding region are small. Research from the Washington State Employment Security department shows that in Whatcom County alone, businesses with less than 50 employees make up the majority of all employers, and employ over 50% of the county’s workforce\(^1\). These small businesses maintain a strong emphasis on promoting from within; in most small manufacturing firms, employers prefer to hire mid-level/operational managers who have come from the production floor and are familiar with the company’s manufacturing processes. As evidenced in the following pages, these and other regional businesses often have difficulty finding qualified managerial staff who have the requisite technical skills and bachelor’s degrees. The college’s new BAS program will help advanced manufacturing employers by providing a baccalaureate degree pathway for their incumbent workers that does not force them to leave the area or substantially reduce their work hours—and help fill vacant supervisory positions with highly-skilled regional residents who have strong ties to the region.

\(^1\) ESD: https://fortress.wa.gov/esd/employmentdata/reports-publications/industry-reports/establishment-size
Bellingham Technical College has been providing Whatcom County with critical workforce education services for over fifty years, and college faculty and staff are passionate about delivering on BTC’s mission of providing student-centered, high-quality professional technical education to its community. The college refines and expands its educational programming on an ongoing basis in order to meet current and future workforce needs. The development of this BAS degree in Operations Management strongly supports BTC’s role and mission.

The college’s mission and strategic goals provide direction for all campus initiatives, and for budget and resource allocations. Bellingham Technical College began a comprehensive, inclusive process to review and update its mission, vision, strategic goals, and values in 2011, and adopted an updated Strategic Plan that included these elements in 2013.

**Figure 1.1**

**VISION**
Bellingham Technical College will be a recognized leader in providing innovative and effective technical education, maximizing student potential and supporting the regional economy through development of a competitive workforce.

**MISSION**
Bellingham Technical College provides student-centered, high-quality professional technical education for today’s needs and tomorrow’s opportunities.

**STRATEGIC GOALS**
1. **Student Success (priority goal):** BTC will facilitate student success through practices, structure, and policies.
2. **Excellence & Innovation:** BTC will promote excellence and innovation throughout the college.
3. **Access:** BTC will increase options and improve access for all students through educational pathways.
4. **College Visibility & Resource Development:** BTC will strengthen the visibility and support of the college locally, regionally, and nationally.
5. **Campus Environment:** BTC will create and maintain a welcoming campus that supports diversity, promotes a sense of community, provides an effective work and learning environment, and encourages respect for individuals.

**VALUES**
As a learning community, Bellingham Technical College is committed to educational excellence and equity realized through a positive, values-based environment. To fulfill Bellingham Technical College’s mission and vision, the college will adhere to the following values:

1. **Student-Centered:** Creating a supportive and inclusive community that results in a high level of student competence, professionalism, and success.
2. **Responsive:** Embracing positive, effective change that creates opportunity and meets current and emerging needs.
3. **Collaborative:** Creating and leveraging partnerships and resources to achieve shared values and goals for students, the college, and the community.
4. **Principled:** Promoting a culture of respect and accountability, reflecting integrity in decision-making, and ensuring responsible stewardship of all resources.

BTC core themes have been developed with appropriate indicators to reflect how BTC fulfills that mission, directs the allocation of resources, and structures evaluations of success. There is
strong alignment between BTC’s core themes and strategic goals. BTC has identified three core themes that individually manifested essential elements of and collectively encompassed its mission.

**Figure 1.2**

<table>
<thead>
<tr>
<th>BTC Core Themes (2013-14 Academic Year)</th>
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<tbody>
<tr>
<td>Student Success &amp; Access</td>
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<tr>
<td>Excellence</td>
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<tr>
<td>College Visibility with Strong Community, Business, &amp; Industry Relations</td>
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High-quality student services and excellence in teaching and learning form the core of student success. BTC is committed to facilitating student success, increasing educational options and improving access for all students to educational pathways. The new BAS degree in Operations Management will help BTC meet this goal by providing a new opportunity in the region for students with associate degrees to continue their education. Most BTC students are low-income and/or first-generation, and are often place-bound. With its flexible, hybrid and online delivery model, the program is designed to ensure easy access for a broad array of current and former BTC students. The college strives to provide educational opportunities that maintain high levels of practical and specific technical and professional information and training. BTC’s BAS program will focus on practical application of theoretical concepts in management, partner with employers to ensure that program students are well-prepared to achieve their career goals, and enhance the diversity of the region’s managerial workforce.

College efforts are directed toward maintaining excellence and innovation in all areas of instruction, student services, and administrative services. BTC has a reputation within the statewide community and technical college system for providing students with excellent professional technical skills through innovative programs and teaching/learning opportunities that boost employment placement rates and other outcomes for students. The BAS program in Operations Management will support college efforts in this area by drawing on best practices and existing college models for instructional practices and student support. The college will ensure the development of strong learning outcomes and assessments, provision of targeted student advising, and financial aid support for these students.

By advancing the college’s visibility through proactive and dynamic communication (both externally and internally), BTC better supports student access to high-quality, student-centered programs that improve student retention and success. The college uses data-informed enrollment strategies to better manage and develop programs needed to meet the needs of employers and the larger community. Offering opportunities based on regional need assessments for students to articulate to a baccalaureate degree on the BTC campus supports these goals and will help the college develop new and enhanced relationships with educational, business and industry partners.
CRITERIA 2: SUPPORT OF THE STATEWIDE STRATEGIC PLAN

The State Board for Community and Technical Colleges’ (SBCTC’s) 2010 Mission Study included long-term needs analyses for priority areas, including:

**Economic demand:** BTC’s BAS program will provide support for regional and state economies by filling a workforce demand gap for employees with managerial skills who have extensive technical skills and experience. In the region, workforce demand from larger manufacturers to the south leaves smaller supply chain employers and other manufacturing companies in our area struggling to find skilled labor, including managers who do not need an extensive in-house training program to provide high-quality production support.

**Student success:** The new program is anticipated to substantially increase the educational attainment levels of regional students, and particularly those from BTC and other colleges who have applicable two-year associate degrees. Student data demonstrates strong interest in this proposed BAS from BTC’s current population. The college anticipates similar levels of interest from BTC alumni. A BAS program in Operations Management located at BTC that is easily accessible and that will accept associate degrees in transfer will transform the landscape of educational opportunity for targeted incumbent workers and students.

**Innovation:** Faculty and staff involved with the Operations Management BAS program will work with multiple regional employers and professional organizations to drive the program’s curriculum development; for example, facilitating student task analyses performed on production floors, coordinating intensive DACUM processes with partners and forming a program advisory committee with extensive industry representation. Program faculty will also utilize best practices in curriculum design from within the state’s community and technical college system—facilitating upper division course experiences that are tightly tied to industry through “focused study” course sections, where student projects replicate industry challenges.

One of the challenges identified in the Mission Study is directly addressed with the development of BTC’s BAS degree in Operations Management. As noted on p. 4 of the Mission Study, “Washington…needs more people with baccalaureate and graduate degrees. Community and technical colleges must expand their contribution to help meet this need.” Raising the educational attainment level of Washington State residents is a primary goal for state leaders. One of the two goals established through the 2013 Roadmap report from the Washington Student Achievement Council is to substantially increase the percentage of Washington State adults who have postsecondary credentials. The report also emphasizes the necessity of implementing programs that are designed to meet student, employer and community needs. The Council’s 2014 Strategic Action Plan notes that geographic location can impact access to postsecondary opportunities, particularly on the part of rural community members.

BTC’s program will support SBCTC Mission Study goals as well as Washington State Achievement Council policies and goals for higher education. The college’s BAS program will increase access to baccalaureate education for the region’s place-bound residents and BTC students, providing streamlined access to a baccalaureate opportunity for associate degree graduates from technical fields that would not otherwise be available. The hybrid and online nature of the program will also support access on the part of working adults. Development of the program will support business and industry needs and contribute to the economic health of the region by providing a pool of qualified managers for existing businesses and support innovation and economic growth by attracting businesses considering starting up or relocating in the area.
BTC is located in the Puget Sound region of Washington State near Bellingham Bay, in a suburban/rural area 100 miles north of Seattle and 25 miles south of the Canada-US border. The college is located in Whatcom County, a district of 2,210 square miles with a population of over 200,000. The majority of its students are local, but students across Washington and other states either commute or move to the area to enroll. BTC provides a rich array of degree and certificate professional technical and transfer programs in eight areas:

- Business and Computer Technology
- Culinary Arts
- Engineering and Advanced Manufacturing
- Fisheries and Aquaculture Sciences
- Health and Education
- Industrial Technology
- Sustainable Technology
- Transportation and Mechanical Technology

The college’s service area is a portrait of economic contrasts. The district has weathered the extreme decline of natural resource-based industries (commercial fishing, logging and paper mills), which now represent a small proportion of the county’s employment. Key economic sectors now include healthcare, tourism and personal service, and manufacturing. Washington State Employment Security data for the region show steady employment growth in a diverse range of manufacturing areas, including in the areas of food, wood product, transportation equipment, and petroleum and coal product manufacturing. Processes and equipment used for these manufacturing sectors are rapidly evolving, requiring employees to have a broad, highly technical knowledge base. BTC must meet the challenge of providing easily accessible baccalaureate options to fulfill the increasingly complex and technologically sophisticated managerial skill demands of regional employers.

The proposed Bachelor of Applied Science Degree in Operations Management at BTC will prepare graduates for in-demand management roles for which baccalaureate-level education is required or preferred, in an array of manufacturing fields. Although it is anticipated that most graduates will pursue production management and IT management positions in advanced manufacturing, students with associate degrees in information technology will also fill additional management positions within the IT industry. Target occupations for the Operations Management program include General Operations Manager (SOC 111021), Industrial Production Manager (SOC 113051), and Information Technology Manager (SOC 113021), and statewide growth is projected for each of these target occupations.

The 2013 Operations Management Employment Outlook report published by the American Production and Inventory Control Society Supply Chain Council notes that in a survey of industry members, “2013 year-end data reports 45% of respondents indicating they anticipate hiring new employees in the next 12 months, with the vast majority of those (93%) planning to hire within one or more of the following operational areas: execution and control of operations, purchasing, quality, resource planning and supply chain management.” This is further indication of demand for current and project demand for operations managers. The report also emphasizes the value of higher education for Operations Managers, noting: “Employees who have completed a bachelor’s degree can expect approximately 18% more in total compensation over a

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2 Whatcom County Profile, ESD: https://fortress.wa.gov/esd/employmentdata/reports-publications/regional-reports/county-profiles/whatcom-county-profile
comparable employee with a high school diploma.” This reinforces the current and growing need for additional baccalaureate-level programs in Operations Management.

Current labor market data\(^5\) indicates significant hiring activity and projected growth statewide for each target occupation. Employment Security data shows industrial production managers in demand in both Whatcom and Skagit counties, and both short and long-term growth are predicted for general operations managers\(^6\). Trends in hiring activity and projected employment growth statewide are reflected at the regional level\(^7\), with comparable figures for each target occupation. One exception is for Industrial Production Managers, with significantly higher growth projected within the region. Table 3.1 reflects demand and growth both statewide and within BTC’s service region:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>General Operations Manager</td>
<td>33570</td>
<td>11.7%</td>
<td>1471</td>
<td>8.3%</td>
</tr>
<tr>
<td>Industrial Production Manager</td>
<td>2806</td>
<td>5.8%</td>
<td>137</td>
<td>11.7%</td>
</tr>
<tr>
<td>Information Technology Manager</td>
<td>9258</td>
<td>13.4%</td>
<td>208</td>
<td>13.4%</td>
</tr>
</tbody>
</table>

An analysis of baccalaureate-level Operations Management programs and job openings\(^8\) in the field, both statewide and regionally, suggests that current demand for qualified Operations Managers exceeds supply:

<table>
<thead>
<tr>
<th>Area</th>
<th># Programs</th>
<th># Annual Program Completers</th>
<th># Annual Job Openings</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>5</td>
<td>209</td>
<td>3787</td>
</tr>
<tr>
<td>Region</td>
<td>1</td>
<td>51</td>
<td>253</td>
</tr>
</tbody>
</table>

The above data indicate that currently only one new qualified operations manager enters the workforce for every five annual job openings within the region, and for every eighteen annual job openings statewide. Furthermore, as previously demonstrated, operations management is a robust employment field poised for significant growth, which will result in substantial increases in new and vacant positions for operations, industrial production, and information technology managers. In order to address the gap between both current and future demand for these roles, more baccalaureate-level training programs must be made available both regionally and statewide, and BTC’s BAS program in Operations Management program will contribute significantly to meeting this growing workforce need.

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\(^5\) Occupation Overview Reports, EMSI: http://www.economicmodeling.com/

\(^6\) Occupational Data, ESD: https://fortress.wa.gov/esd/wilma/wdclists/

\(^7\) Defined for BTC as encompassing Whatcom, Skagit, and Island counties.

\(^8\) 2012, the most recent year for which data are available. EMSI: http://www.economicmodeling.com/
BTC’s proposed BAS in Operations Management will build on the college’s strong advanced manufacturing program cluster. Graduates from Associate of Applied Science programs such as Electro Mechanical Technology, Process Technology, and Computer Networking will feed into the BAS degree, and these programs will provide curricular infrastructure upon which to build courses in system design, quality assurance, and logistical planning, lean concepts, and management information systems. Graduates will primarily fill production and IT management positions within the manufacturing sector.

Development of this degree will allow current and former BTC students across cluster areas to pursue a bachelor’s degree in operations management which can be applied to their technical field, and provide them with managerial skills needed to maintain and plan operations across the service and production sectors. Tables 4.1 and 4.2 provide history and enrollment patterns for the existing two-year foundational programs.

As tables 4.1 and 4.2 indicate, enrollment headcount levels for the past five years in BTC’s feeder programs show strong enrollment patterns and indicate a substantial pool of current students and former graduates who are likely to have interest in a regional 2+2 BAS option in Operations Management.
The strength of the Operations Management degree will be its potential for contextualized study. BAS students will use their technical knowledge to solve the type of real-world managerial and operations-oriented problems they are likely to face in industry settings. All programs listed share essential curricular elements which will help prepare associate’s degree graduates for success in the BAS program, including work on project development, work team collaboration, and documentation creation, use and review. AAS-T programs include content in quality assurance techniques, systems design, systems management, professional ethics, safety, and training in lean production concepts. Expanding on the foundational content of the two-year programs, the BAS program will educate students about how to manage change, develop an understanding of how to plan for necessary adaptation to industry or organizational changes, and how to implement those changes with as few adverse consequences as possible. All programs include extensive work in application of technical skills in the students’ chosen fields. The combination of current technical skills and management courses related to operations and production will enable the BAS graduates to meet the growing needs of our employers.
CRITERIA 5: STUDENT DEMAND FOR PROGRAM WITHIN THE REGION

**Current Student Enrollment**
It is anticipated that the majority of students who will enter the Operations Management BAS program will have completed an advanced manufacturing or information technology associate degree program at BTC. These programs are well established at BTC and show strong annual completion numbers:

<table>
<thead>
<tr>
<th>Program</th>
<th>Completions (2013-2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Networking</td>
<td>48</td>
</tr>
<tr>
<td>Computer Software Support</td>
<td>10</td>
</tr>
<tr>
<td>Diesel Technology</td>
<td>69</td>
</tr>
<tr>
<td>Electrician</td>
<td>24</td>
</tr>
<tr>
<td>Electro-Mechanical Technology</td>
<td>19</td>
</tr>
<tr>
<td>Electronics</td>
<td>18</td>
</tr>
<tr>
<td>Instrumentation &amp; Control Technology</td>
<td>36</td>
</tr>
<tr>
<td>Precision Machining</td>
<td>25</td>
</tr>
<tr>
<td>Process Technology</td>
<td>52</td>
</tr>
<tr>
<td>Welding Technology</td>
<td>58</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>359</strong></td>
</tr>
</tbody>
</table>

Based on these numbers, it is estimated that these BTC feeder programs will be graduating approximately 350 students annually who will be eligible to continue into the Operations Management BAS program. Students who have completed similar associate degree programs in at other colleges in the region will also be eligible to continue into the BAS program.

**Student Demand**
As shown in Table 5.2, in a 2015 survey of 54 students in BTC feeder programs, 82% indicated interest in earning a bachelor’s degree, 90% indicated they would consider earning a BTC BAS degree, and 74% indicated they would consider earning a bachelor’s degree in Operations Management at BTC:

<table>
<thead>
<tr>
<th>Item</th>
<th># Yes/Maybe</th>
<th># Responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you interested in earning a bachelor’s degree after completing your associate’s degree?</td>
<td>48</td>
<td>54</td>
<td>82%</td>
</tr>
<tr>
<td>Would you consider earning a bachelor’s degree at BTC, if the college offered bachelor’s degree programs?</td>
<td>49</td>
<td>54</td>
<td>90%</td>
</tr>
<tr>
<td>Would you consider earning a bachelor’s degree in Operations Management at BTC?</td>
<td>40</td>
<td>54</td>
<td>74%</td>
</tr>
</tbody>
</table>

As indicated above, currently enrolled students within BTC’s advanced manufacturing program cluster have high levels of interest in continuing on in a BTC BAS program that will move them quickly towards their baccalaureate goals.

**Demand in excess of opportunity**
Within the service region, Western Washington University (WWU), offers a Business Administration program with an Operations Management concentration. The Business Administration program at WWU graduates approximately 51 students annually with an

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9 Institutional data, completions by program (2015).
Operations Management concentration, which is not sufficient to meet the demand for the 250+ annual regional job openings in this field. In addition, this four-year degree is designed for traditional college students and accepts limited credit from BTC’s professional technical associate degree programs. A low percentage of BTC professional technical program graduates continue their education at WWU. The Operations Management BAS at BTC will be specifically designed to offer flexible access and a streamlined transfer pathway for two-year degree graduates who are either current students or already employed in their fields.

An Operations Management BAS program at BTC would address the unmet regional demand for Operations Managers with technical backgrounds, in addition to contributing to satisfying statewide demand for qualified Operations Managers.

Changes in industry standards
Demand for qualified operations managers with baccalaureate degrees continues to increase: at least half of current operations managers in Washington State hold a Bachelor’s degree or above. Only 32% of Whatcom County residents aged 25 or older hold a Bachelor’s degree and as current positions open up due to retirement or other factors and as new positions are created, the percentage of operations management positions requiring baccalaureate preparation is anticipated to rise. BTC’s program will help address the need for operational managers who are baccalaureate-prepared.

Changes in the field of operations management have paralleled the increasing rate of change in advanced manufacturing fields— from the type of equipment used to increased focus on customer service and efficiency. Regional employers are focused on hiring managers who have knowledge of and experience with lean process management techniques and effective project management skills. BTC’s program will incorporate lean principles and project management theory and skills throughout the curriculum. During program development, faculty and staff will work closely with advisory committee members and other industry representative to ensure that curriculum matches industry needs.

Enrollment projections
Projected enrollment numbers, while significant in terms of predicted regional impact, remain conservative. These projections represent minimum baselines, and it is anticipated that enrollment in BTC’s Operations Management BAS program will exceed projections.

<table>
<thead>
<tr>
<th>Project Year</th>
<th>Projected Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-2017</td>
<td>15</td>
</tr>
<tr>
<td>2017-2018</td>
<td>25</td>
</tr>
<tr>
<td>2018-2019</td>
<td>30</td>
</tr>
<tr>
<td>2019-2020</td>
<td>40</td>
</tr>
<tr>
<td>2020-2021</td>
<td>40</td>
</tr>
</tbody>
</table>

Student enrollments and student and industry demand all show a demand for operations management training at the baccalaureate level that exceed the capacity of the region’s current educational system.

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11 Quick Facts, United States Census Bureau: http://quickfacts.census.gov/qfd/states/53/53073.html
As shown in BTC’s response to Criteria 3, the regional need for managers who have hands-on backgrounds in professional technical areas is high. A wide variety of manufacturing firms need workforce training support to fill unique managerial needs. Even small employers often have complex, automated service and production systems that are, at least in part, specific to their field. These employers are looking for operations managers that already have a good initial understanding of these general processes for the field and who are already familiar with or will be able to understand quickly the components that are unique to each company.

In smaller manufacturing firms, financial resources are generally limited and the companies are more vulnerable to economic fluctuations and industry competition; they need to turn out high-quality products efficiently and on-time. This understanding includes familiarity with and ability to work with the equipment or procedures that are most commonly used, how to conduct effective quality control and inspection, and how to use lean and project management skills to support effective and efficient service or production processes.

Managers knowledgeable in these process and quality improvement strategies will help these companies maintain or increase their competitive edge. The need for operations managers with a wide variety of foundational skills continues to grow, and is needed not only in incoming employees, but in members of the current workforce. As a result of evolving technologies and needs, these manufacturing companies prefer to have managers who are cross-trained in a variety of skills whenever possible, and who stay in school longer to learn as much as they can, becoming prepared to enter managerial positions.

In the local area, BTC has started discussions regarding its proposed development of an Operations Management BAS with Western Washington University (WWU) and has reached out to Whatcom Community College, the Center of Excellence for Global Trade & Supply Chain Management, and Skagit Valley College. BTC is committed to providing ongoing opportunities for educational partners to contribute input, help identify collaborative pathways, and support development of its BAS. While universities such as WWU offer baccalaureate opportunities in programs such as Manufacturing and Supply Chain Management and Business Administration with Operations Management specialization, BTC’s BAS program is anticipated to attract a unique student population. Traditional four-year baccalaureate of science programs typically contain general content, require full-time, on-site attendance, and accept minimal transfer credit from applicants with two-year AAS-T degrees. This combination of factors makes it difficult for graduates with professional technical associate degrees to gain easy, local access to a baccalaureate in operations management program that will allow them to work and fulfill family responsibilities, or apply past college credit. Currently, the closest colleges offering BAS degrees in management are Peninsula College and Clover Park Technical College, both over 100 miles away.

Many two-year college students are older, have family responsibilities and ties to the region, and are employed. For these current program students and former AAS-T degree graduates, an option for a two-year BAS degree in Operations Management that will allow them to fully apply their two-year degree credits will be invaluable. These students are in need of a flexible, accessible pathway to assist them in continuing their education and advance in their careers. For BAS graduates, master’s degree options specifically designed for working adults with competitive tuition and fee structures will be particularly appropriate, such as Western Governors
University’s online MS program in Management and Leadership or Minot State University’s online MS program in Management.

BTC will work closely with state educational partners, workforce organizations and industry groups to maintain collaborations where possible and foster conversations with employers through conferences, meetings, focus groups, advisory committee meetings, and skill panels. BAS staff and faculty will be actively strengthening and refining connections as they develop internships, perform task analyses, and form advisory and DACUM groups to help shape curriculum for continuing students and incumbent workers. Employers and representative groups will continue to meet with program personnel and other partners to discuss ways to upgrade new and incumbent workers’ skill sets and increase the pool of individuals starting a pathway into operations management careers. All partners recognize that keeping this industry cluster healthy with a skilled workforce is vital for Washington’s Puget Sound region and the State.
Bachelor of Applied Science Degree in Engineering Technology

Statement of Need
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**BAS DEGREE IN ENGINEERING TECHNOLOGY**

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</tr>
</tbody>
</table>
COVER SHEET
STATEMENT OF NEED

Program Information

Institution Name: Bellingham Technical College
Degree Name: Engineering Technology
CIP Code: 14.0101

Name(s) of existing technical associate degree(s) that will serve as the foundation for this program:

<table>
<thead>
<tr>
<th>Degree</th>
<th>CIP Code</th>
<th>Year Began</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Engineering Technology AAS-T</td>
<td>15.0201</td>
<td>1997</td>
</tr>
<tr>
<td>Mechanical Engineering Technology AAS-T</td>
<td>15.0805</td>
<td>1995</td>
</tr>
<tr>
<td>Electronics Engineering Technology AAS-T</td>
<td>15.0303</td>
<td>1993</td>
</tr>
</tbody>
</table>

Proposed Start Implementation Date (i.e. Fall 2014): Fall 2016
Projected Enrollment (FTE) in Year One: 15
at Full Enrollment by Year: 2018

Funding Source: State FTE: ☒ Self-Support: ☐ Other: ☐

Mode of Delivery

Single Campus Delivery: Yes
Off-site: No
Distance Learning: Yes – program will be hybrid and online

Statement of Need: Please see criteria and standard sheet
Page Limit: 20 pages

Contact Information (Academic Department Representative)

Name: Gabriel Mast
Title: Dean of Professional Technical Education
Address: 3028 Lindbergh Avenue, Bellingham WA 98225-1599
Telephone: 360-752-8433
Fax: 360-752-7233
Email: Gabriel.mast@btc.ctc.edu

Chief Academic Officer

Date
INTRODUCTION

Bellingham Technical College (BTC) proposes to establish a Bachelor of Applied Science (BAS) degree in Engineering Technology that will serve at least 40 students per year and fill a gap in educational opportunities for the state’s western region. Employers and education partners in the college’s service region (Whatcom, Skagit, and Island counties) agree that a BAS in Engineering Technology will complement existing training efforts and address a pressing need in both student and employer demand. While other regional four-year educational institutions offer Engineering degrees, BTC’s BAS in Engineering Technology will be the only Engineering Technology program on the state’s west side, and the only public four-year engineering program in the state that offers students the ability to step out with a two-year degree, as well as the opportunity to seamlessly continue on to earn a four-year degree. This program will combine theoretical content with a heavy emphasis on practical application, providing current students and Engineering Technicians with the opportunity to complete baccalaureate degrees and advance their careers. The BAS in Engineering Technology is designed to build on BTC’s Engineering Technology associate degrees, including:

- Civil Engineering Technology
- Composites and Process Engineering Technology
- Mechanical Engineering/Mechanical Design Technology
- Electronics Engineering Technology

As detailed in succeeding pages, western Washington boasts a high density of aerospace, engineering and advanced manufacturing companies, which are demanding Engineering Technologists with strong backgrounds in and understanding of technical skills in specialized areas such as those listed above. Economic rebound and rapid growth statewide in aerospace and manufacturing fields are driving a sharp increase in demand for qualified personnel in these areas. While trying to respond to increased demand for services and products, regional employers are also faced with a corresponding increase in retirement rates among senior engineers and technologists. BTC’s BAS in Engineering Technology will help fill an immediate and critical need for bachelor-prepared Engineering Technologists in a wide variety of industries.

As evidenced in Figure 0.1 above, Engineering and Engineering Technology are separate but closely related fields. As will be discussed in Criteria 3, graduates of four-year Engineering Technology programs are typically identified as Engineering Technologists, while graduates of traditional Engineering programs are identified as Engineers. In general, industry does not differentiate between the two different four-year pathways in engineering, but rather draws a distinction between graduates of two-year programs and four-year programs. Engineers (BS) and Engineering Technologists (BAS) are categorized together in workforce data sources as Engineers. Demand for Engineering Technologists and Engineers is

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1 “Engineering vs Engineering Tech,” ASME: https://www.asme.org/
2 Ronald Land, “Engineering Technologists are Engineers,” Journal of Engineering Technology (Spring 2012).
determined without differentiation by major data sources such as the US Bureau of Labor Statistics. In contrast, Engineering Technology students who complete two-year AAS or AAS-T degrees are typically employed and categorized in workforce data sources as Engineering Technicians. Consequently, workforce data are only available for the occupational categories of Engineering Technician (AAS/AAS-T education) or Engineer (BS/BAS education), and it is therefore appropriate to focus on Engineer roles in considering the employment outcomes associated with this proposed BAS program (as described in further detail in Criteria 3).

Typically, students enrolled in Engineering BS programs take advanced mathematics and science courses and focus on mastering advanced theoretical and conceptual content. A significant portion of their curriculum is typically dedicated to research and design. Completion of traditional engineering degrees prepares students for employment in the field or to transition into graduate programs in engineering. Engineering Technology BAS programs, however, include more applied mathematics and science courses, focus more on practical application and implementation, and have greater emphasis on student employment upon completion. The proposed BAS program in Engineering Technology will fill a gap in workforce need for baccalaureate-prepared Engineering Technologists who have extensive applied skills, particularly in the areas of industrial, civil, electrical, and mechanical engineering, and in industries such as manufacturing, aerospace, construction, and/or product design.

Regional industry leaders support the development of a BAS program in Engineering Technology. Gil Lund, owner of local Lund Engineering, reflects on specialized industry needs and notes that:

"The engineering profession is an occupation that demands a mastery of both the theoretical sciences and the application of these sciences using real world tools and practices. The use of both theoretical tools (computer modelling, mathematics, physics, statistics) and applied tools (3D printers, CNC, wrenches, software programming, and measurement equipment) are all required to become a successful engineer in the modern economy. Having programs which specialize in the mastery of the applied tools first has shown to attract and inspire students into the exciting and challenging field of engineering. I therefore believe it is vital for BTC to provide this gateway program which will inspire future engineers to engage in the engineering profession."

One focus of the proposed BAS program in Engineering Technology will be attracting and inspiring underrepresented student populations to enter the engineering field. The college’s service region in the northwest corner of Puget Sound is becoming increasingly diverse, with significant growth in Hispanic and other ethnic populations who live in cultural enclaves in the most rural parts of the county. As a port city near the Canadian border, Bellingham attracts refugees and immigrants from Eastern Europe, Russia, Asia, and East India, as well as a growing number of people of Hispanic heritage. Most of the college’s students are long-term area residents with family and work obligations and are reluctant to relocate out of the region. The proposed BAS program in Engineering Technology will create a seamless pathway for place-bound area residents who hold professional-technical associate’s degrees in Engineering Technology, and who do not have access to other baccalaureate degree options related to engineering. It is anticipated that the college’s program will also attract and serve students from outside the service area, who may travel or relocate to the region, further enhancing state workforce capacity in this critical area.

Providing opportunities for current program students, graduates of other two-year Engineering Technology programs, and Engineering Technicians in the field to earn baccalaureate-level Engineering Technology credentials will increase advancement opportunities, address a critical demand among employers, and address a strong community need for more baccalaureate options for two-year degree graduates. Given the established Engineering Technology lab and facilities infrastructure at BTC, the college is uniquely prepared to offer a BAS program in Engineering Technology. Students in the proposed BAS program will practice application of theoretical concepts in the college’s state-of-the-art

3 “Engineering vs Engineering Technology,” ABET: http://www.abet.org/engineering-vs-engineering-technology/
technical labs, including those dedicated to welding, machining, electro mechanical technology, process operations, engineering design/CAD, and composites work. The college is fully committed to developing this BAS program and will provide substantial support to ensure its success.
Bellingham Technical College is a two-year technical college located in Whatcom County, a rural/urban area in the northwest corner of Washington State. BTC serves its region with adult basic education, developmental courses, and professional technical certificate and degrees as well as direct transfer options. Approval of BTC’s proposal to develop a BAS degree in Engineering Technology will support the college’s mission to transform the educational experiences and workforce achievement levels of the region’s citizens.

BTC’s Institutional Effectiveness Cycle, which includes planning, implementation, data collection and analysis, assessment of results, and reporting, will be used to ensure that the proposed BAS program will be supported and implemented effectively. BTC’s Strategic Plan is used to guide the college’s work as it strives to accomplish its core theme objectives and to fulfill its mission.

**Vision:** Bellingham Technical College will be a recognized leader in providing innovative and effective technical education, maximizing student potential and supporting the regional economy through development of a competitive workforce.

**Mission:** Bellingham Technical College provides student-centered, high-quality professional technical education for today’s needs and tomorrow’s opportunities.

**Strategic Goals:**

- **Student Success** (priority goal): BTC will facilitate student success through practices, structure, and policies.
- **Excellence & Innovation:** BTC will promote excellence and innovation throughout the college.
- **Access:** BTC will increase options and improve access for all students through educational pathways.
- **College Visibility & Resource Development:** BTC will strengthen the visibility and support of the college locally, regionally, and nationally.
- **Campus Environment:** BTC will create and maintain a welcoming campus that supports diversity, promotes a sense of community, provides an effective work and learning environment, and encourages respect for individuals.

Institutional core themes have been developed with appropriate indicators to reflect how well BTC fulfills its mission, directs the allocation of resources, and structures evaluations of success. Core themes are closely aligned with BTC’s strategic goals.

**Core Theme One: Student Success and Access**

Student Success and Access are two of the college’s priority goals, and are at the heart of its mission. BTC is committed to facilitating student success, increasing educational options and improving access for all students to educational pathways. The new BAS program in Engineering Technology will help BTC meet this goal by providing a new opportunity in the region for students with associate degrees in Engineering Technology to continue their education. Many BTC students are low-income and/or first-generation, and are often place-bound. With its flexible hybrid and online delivery model, this BAS program is designed to ensure easy access to higher degrees for former BTC Engineering Technology students. The college strives to provide educational opportunities that maintain high levels of practical and specific technical and professional information and training. BTC’s BAS program in Engineering Technology will focus on practical application of theoretical concepts in engineering; students will use technical knowledge to solve real-world engineering, operations, and industrial problems they are likely to face in industry setting. The program curriculum will focus on development of industry-based capstone engineering projects, creative and critical thinking and problem-solving skills, analytical thought, engineering ethics, team skills, and effective communication. Faculty and staff will work with local
employers to ensure that program students are well-prepared to achieve their career goals, and contribute to enhancing the diversity of the college’s student population and the region’s engineering workforce.

Core Theme Two: Excellence

BTC’s educational programs and courses must be of high quality in order for the college to fulfill its mission and vision. College efforts are directed toward maintaining excellence and innovation in all areas of instruction, student services, and administrative services. This BAS program in Engineering Technology will support this goal by drawing on best practices and existing models for instructional practices and student support. The college will work with workforce partners, faculty and staff to ensure the development of strong learning outcomes and assessments and provision of targeted student advising and financial aid support for these students.

Core Theme Three: College Visibility with Strong Community, Business, and Industry Relations

Meeting the workforce education demands of local and regional business, industry, and agency partners is an integral component of BTC’s mission. One of BTC’s strategic goals is to strengthen the visibility and support of the college locally, regionally, and nationally. Offering opportunities for current students to seamlessly complete a baccalaureate degree on the BTC campus, and offering incumbent workers an easily-accessible opportunity to enhance their qualifications supports these goals. This program addition will help the college develop new and enhanced relationships with educational, business and industry partners through ongoing program development processes and increase the college’s positive reputation around workforce education.
CRITERIA 2: SUPPORT OF THE STATEWIDE STRATEGIC PLAN

Industry leaders such as Boeing, Microsoft, and British Petroleum help make Washington State a hotspot for STEM careers. In fact, the Washington State Employment Security Department reports show that Engineer ranks in the top five occupations most in demand. At the same time, while overall production of engineering baccalaureates has increased, the field shows one of the biggest gaps between employer demand and baccalaureate production. According to the Washington State Student Achievement Council, the state’s gap between production of engineering baccalaureates and employer demand is one of the highest out of all occupational fields.

As emphasized in the State Board for Community and Technical College 2010 Mission Study, “Washington…needs more people with baccalaureate and graduate degrees. Community and technical colleges must expand their contribution to help meet this need.” This study included long-term needs analyses for the following priority areas:

- **Economic Demand:** Strengthening state and local economies by meeting the demands for a well-educated and skilled workforce.
- **Student Success:** Achieving increased educational attainment for all residents across the state.
- **Innovation:** Using Technology, collaboration and innovation to meet the demands of the economy and improve student success.

Raising the educational attainment level of Washington State residents is a primary goal for state leaders. One of the two goals established through the 2013 Roadmap report from the Washington Student Achievement Council is to substantially increase the percentage of Washington State adults who have postsecondary credentials. The report also emphasizes the necessity of implementing programs that are designed to meet student, employer and community needs. The Council’s 2014 Strategic Action Plan notes that geographic location can impact access to postsecondary opportunities, particularly for rural community members.

BTC’s program will support SBCTC mission goals as well as Washington State Achievement Council policies and goals for higher education. The college’s BAS program in Engineering Technology will open up access to baccalaureate education for BTC students and graduates from other Engineering Technology programs, providing streamlined access to a baccalaureate opportunity that would not otherwise be available. The hybrid and online nature of the program will support access for working adults. Development of the program will also support business and industry needs and contribute to the economic health of the region and state, by providing a pool of qualified Engineering Technologists for existing businesses and support innovation and economic growth by attracting businesses considering starting up or relocating here. All of these development activities support the areas of focus identified above.

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Bellingham Technical College serves a district of 2,107 square miles with an estimated population of over 206,000 in 2013. Whatcom County is the 9th largest county (out of 39 counties) in Washington State, and is experiencing strong population growth. The college’s service region is perched on the Pacific Rim and is bordered by Canada, with a robust export industry fueled by an innovative manufacturing sector. The region hosts an extensive aerospace and manufacturing supply chain for companies such as Boeing, several refineries, including BP, Phillips 66 and Shell, and large boat building and food processing sectors. Whatcom County and surrounding regions are continuing a steady economic recovery, hosting successful firms such as Zodiac Aerospace, CH2M Hill, Anvil Corporation, and Janicki Industries, as well as other engineering and aerospace firms in the area who are looking for graduates of four-year Engineering programs with a strong focus on hands-on applied learning.

Graduates from Engineering Technology baccalaureate programs are typically referred to as Engineering Technologists. However, industry often does not distinguish between graduates of traditional Engineering programs and those from four-year Engineering Technology programs, but rather differentiates on the basis of position responsibilites. In a 2012 paper examining industry perception of the differences and similarities between Engineering Technologists and Engineers, the author surveys more than 200 companies regarding the two types of graduates:

“The survey results indicate that roughly 7 out of 10 companies make no distinctions between graduates when hiring into engineering positions, nor do they make significant distinctions in assigning functions and responsibilities, nor do they note important differences in capabilities of either group while on the job.”

Workforce data typically organize outcomes for the field of engineering into two functional categories: “Engineering Technician” for two-year degree holders, and “Engineer” for four-year degree holders. Primary workforce data sources such as Washington State’s Employment Security Department and the National Bureau of Labor Statistics do not have a separate workforce classification for Engineering Technologists, and instead these data are combined into the Engineer category. Therefore, BTC will focus on the Engineer category to measure demand for baccalaureate-level engineering professionals in the region and state.

Nationally, independent studies show strong evidence of shortages in job categories specifically related to Engineering Technologists, with severe shortages of 50%-60% reported by many surveyed companies. In a recent local survey of industry partners regarding the proposed four-year Engineering Technology program at BTC, 75% of respondents identified unmet need for a baccalaureate-level Engineering Technology program in the region, and the same percentage of respondents were in support of BTC offering such a program. This survey also solicited qualitative feedback. Excerpts from two industry responses are highlighted below.

Zodiac Aerospace, an international engineering services company with a location in Bellingham, provides aerospace retrofit services and is a major employer in the area. Design Engineer Chris Locke noted: “Having an option to continue further in one’s education would be a very nice bonus … I think most people would opt for the option, even if they wanted to take a break after obtaining their AAS to join the workforce, before returning for a BAS later down the road. I feel this is a step in the right direction for BTC.”

Glacier Services is an automation and engineering services company for the oil and gas industry with consultants located in the college’s service area. Comments from Engineer Matt Manske included observations such as the following: “A BAS Engineering Tech degree program provides a logical

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8 Industry partner survey (2015), BTC.
9 Page Bellingham Technical College BAS Statement of Need: Engineering Technology
stepping stone for students to continue learning and growing as professionals. Relationships with local industry partners can be leveraged to ensure that the program develops a good reputation for student outcomes.”

It is clear from both local and national industry data and feedback that there is unmet demand for engineering personnel with baccalaureate-level training, and that this demand will persist and increase into the future. BTC’s BAS in Engineering Technology will produce well trained graduates to meet the increasing demands of industry for qualified engineering personnel, both in the region and across the state, in the following target occupations:

<table>
<thead>
<tr>
<th>Occupation</th>
<th>SOC Code</th>
<th>Required Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engineer</td>
<td>172011</td>
<td>Bachelor’s degree</td>
</tr>
<tr>
<td>Civil Engineer</td>
<td>172051</td>
<td>Bachelor’s degree</td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td>172071</td>
<td>Bachelor’s degree</td>
</tr>
<tr>
<td>Environmental Engineer</td>
<td>172081</td>
<td>Bachelor’s degree</td>
</tr>
<tr>
<td>Industrial Engineer</td>
<td>172112</td>
<td>Bachelor’s degree</td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td>172171</td>
<td>Bachelor’s degree</td>
</tr>
</tbody>
</table>

The Employment Security Department of Washington State classifies most of these target occupations as currently ‘in demand’ both statewide and regionally (Whatcom, Skagit, and Island counties):

<table>
<thead>
<tr>
<th>Occupation</th>
<th>State</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engineer</td>
<td>Not In Demand</td>
<td>Not Available</td>
</tr>
<tr>
<td>Civil Engineer</td>
<td>In Demand</td>
<td>In Demand</td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td>In Demand</td>
<td>Balanced</td>
</tr>
<tr>
<td>Environmental Engineer</td>
<td>In Demand</td>
<td>Not Available</td>
</tr>
<tr>
<td>Industrial Engineer</td>
<td>In Demand</td>
<td>In Demand</td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td>Balanced</td>
<td>In Demand</td>
</tr>
</tbody>
</table>

Current labor market data indicates significant job numbers and strong projected growth both regionally and statewide for each target occupation:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Engineer</td>
<td>7545</td>
<td>2.6%</td>
<td>14</td>
<td>33.1%</td>
</tr>
<tr>
<td>Civil Engineer</td>
<td>12296</td>
<td>8.6%</td>
<td>417</td>
<td>7.3%</td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td>5895</td>
<td>5.7%</td>
<td>141</td>
<td>8.4%</td>
</tr>
<tr>
<td>Environmental Engineer</td>
<td>1525</td>
<td>6.8%</td>
<td>44</td>
<td>7.4%</td>
</tr>
<tr>
<td>Industrial Engineer</td>
<td>6611</td>
<td>6.9%</td>
<td>157</td>
<td>13.0%</td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td>6563</td>
<td>4.3%</td>
<td>207</td>
<td>9.8%</td>
</tr>
</tbody>
</table>

It is also worth noting that several of these target occupations are currently “top occupations” in Washington. In fact, in the most recent “Top 25 Occupations Report” for Washington, Industrial Engineer

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10 While Aerospace Engineer is not currently listed as ‘in demand’ by the ESD, there is widespread understanding in the industry that demand for this occupation will increase dramatically in the near future. As indicated in Table 3.3, growth projected by 2016 for this occupation is a staggering 33% for the region.
was ranked 3rd, Mechanical Engineer was ranked 4th, and Electrical Engineer was ranked 17th out of all occupations statewide.\textsuperscript{12}

Despite increasing demand for Engineers, an analysis of baccalaureate-level Engineering programs and job openings\textsuperscript{13} in the field statewide suggests current production of qualified personnel to be inadequate:

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|}
\hline
Area & # Programs & # Annual Program Completers & # Annual Job Openings \\
\hline
State & 28 & 2113 & 8340 \\
\hline
\end{tabular}
\caption{Programs, Completers, Job Openings\textsuperscript{14}}
\end{table}

This statewide reality is reflected within BTC’s region: the only accredited, public Engineering programs in the region currently are those offered through Western Washington University (WWU). In the past, WWU offered Engineering Technology programs, but as of 2014, only offers traditional Engineering programs. BTC’s BAS program in Engineering Technology will differ in design and purpose from WWU’s more traditional Engineering programs. Traditional Engineering programs place a greater emphasis on theoretical and scientific aspects of engineering. Graduates of such programs tend to be more theoretical, analytical, and design-oriented. Engineering Technology programs, on the other hand, focus on the more practical applications of engineering and applied activities. These program graduates are typically more hands-on and application-oriented due to the strong elements of practice and application of technology in their curricula. Although Engineering education is better preparation for some roles in the field, Engineering Technology education is better for other roles, and it is important to recognize that the two types of engineering programs produce equally viable graduates. There is need in industry for both Engineers and the Engineering Technologists, which hints at why industry does not distinguish between the two degrees.

The Engineering programs at WWU tend to enroll traditional college students who have met highly competitive academic standards, and who intend to complete a four-year program in its entirety prior to entering the workforce or continuing into a graduate program. The Engineering Technology program at BTC will focus on serving non-traditional students, students who may initially be unsure about pursuing a four-year degree, and students returning from employment as Engineering Technicians to obtain four-year degrees. BTC’s BAS program in Engineering Technology will feature a practical, hands-on approach, and a greater emphasis on applied math and science coursework. The only other baccalaureate-level Engineering Technology programs in the state are offered through Central Washington University and Eastern Washington University, which are 200 and 350 miles away respectively. As a result, the proposed BAS program in Engineering Technology at BTC will fill a gap in educational opportunities for the entire western half of the state, for both prospective students and employers. Together, the Engineering (WWU) and Engineering Technology (BTC) degree programs will accommodate a diversity of learning styles and career goals. There is room for both degree options within our region, as the skills and interests of graduates of Engineering and Engineering Technology programs are complementary. It is also important to note that there are are educational institutions (e.g. Texas A&M University, Penn State, Rochester Institute of Technology, Purdue, etc.) that successfully offer both Engineering and Engineering Technology pathways to students within the same institution.

\textsuperscript{12} “Top 25 Occupations (December 2014),” ESD: https://fortress.wa.gov/esd/employmentdata/docs/occupational-reports/
\textsuperscript{13} 2012, the most recent year for which data are available. “Program Overview Reports,” EMSI: http://www.economicmodeling.com/
\textsuperscript{14} “Program Overview Reports,” EMSI: http://www.economicmodeling.com/. *Note: Due to the transition from Engineering Technology to Engineering at WWU for the 2014/2015 academic year, current labor market data reflect zero annual completions for Engineering/Engineering Technology programs in the region. Therefore, these (inaccurate) data have been excluded from this analysis.
BTC has a strong history of providing two-year professional technical degrees in Engineering Technology and closely related programs (see Table 4.1). The majority of these programs have been in existence for more than two decades. Over the last five years, long-standing programs such as Mechanical Engineering Technology and Civil Engineering Technology have been operating with strong enrollment (see Table 4.2), while new programs implemented in the last few years in the college’s Aerospace and Engineering Technology areas are also showing promising enrollment patterns. Related programs such as Instrumentation & Control and Geomatic Technology show steady enrollments over a substantial time period. As described below, BTC has recently created an Engineering Technology AAS-T degree that combines all of the college’s continuing and new Engineering Technology programs under one general degree. This new structure is transforming BTC’s Engineering Technology program area, which shows strong enrollment in its first year of operation.

<table>
<thead>
<tr>
<th>Program</th>
<th>CIP</th>
<th>Years Active</th>
<th>Average Annual Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Technology</td>
<td>603</td>
<td>1</td>
<td>61</td>
</tr>
<tr>
<td>Civil Engineering Technology</td>
<td>612</td>
<td>18</td>
<td>27</td>
</tr>
<tr>
<td>Mechanical Engineering/Mechanical Design Technology</td>
<td>642</td>
<td>20</td>
<td>31</td>
</tr>
<tr>
<td>Composites &amp; Process Engineering Technology</td>
<td>603</td>
<td>1</td>
<td>61</td>
</tr>
<tr>
<td>Electronics Engineering Technology</td>
<td>630</td>
<td>22</td>
<td>39</td>
</tr>
<tr>
<td>Instrumentation &amp; Control</td>
<td>637</td>
<td>22</td>
<td>128</td>
</tr>
<tr>
<td>Geomatic Technology (formerly Surveying)</td>
<td>624</td>
<td>22</td>
<td>15</td>
</tr>
</tbody>
</table>

**Total Average Annual Enrollment: 301***

*Unduplicated

<table>
<thead>
<tr>
<th>Program</th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Technology</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>61</td>
</tr>
<tr>
<td>Civil Engineering Technology</td>
<td>45</td>
<td>24</td>
<td>23</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>Mechanical Engineering/Mechanical Design Technology</td>
<td>48</td>
<td>35</td>
<td>29</td>
<td>28</td>
<td>14</td>
</tr>
<tr>
<td>Composites &amp; Process Engineering Technology</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>61</td>
</tr>
<tr>
<td>Electronics Engineering Technology</td>
<td>43</td>
<td>29</td>
<td>46</td>
<td>41</td>
<td>33</td>
</tr>
<tr>
<td>Instrumentation &amp; Control</td>
<td>161</td>
<td>122</td>
<td>118</td>
<td>121</td>
<td>115</td>
</tr>
<tr>
<td>Geomatic Technology (formerly Surveying)</td>
<td>27</td>
<td>16</td>
<td>5</td>
<td>8</td>
<td>17</td>
</tr>
</tbody>
</table>

Two-year Engineering Technology and related programs at BTC are currently undergoing programmatic and structural changes. Traditionally, each program has been “stand-alone” with separate curricula and course requirements, and students were required to decide from the outset which specialized Engineering Technology program to pursue. However, as of the 2014-2015 academic year, students pursuing the AAS-T in Engineering Technology degree will initially take core courses in general education/academics and Engineering Technology, and later take courses in a field of specialization to complete the degree. This program of study prepares students both for initial entry into the workforce, as well as providing a solid academic and technical foundation to transition to third and fourth year baccalaureate-level coursework. Current AAS-T program structure in the Engineering Technology programs provides students with: 35 transfer-level general education credits, including courses in Technical Writing (ENGL&235), Chemistry (CHEM&161), Engineering Physics (PHYS&221), and Calculus.
(MATH&151); 32 credits (27 at the transfer level) in Engineering/Engineering Technology; and 40 credits in an area of specialization.

Students in closely related programs will also receive substantial academic preparation for articulation into the proposed BAS program. For example, in addition to writing and communication courses, students in Instrumentation & Control are required to take MATH&141 and CHEM&161, and also cover significant math and chemistry content embedded in program curricula. Electronics Engineering students are required to complete mathematics through MATH&142, transfer-level English and Technical Writing, and transfer-level computer programming and chemistry courses. Workforce courses in these programs are rigorous, and will prepare students well for third and fourth year coursework in Engineering Technology.
CRITERIA 5: STUDENT DEMAND FOR PROGRAM WITHIN THE REGION

It is anticipated that the majority of students entering the Engineering Technology BAS program at BTC will have completed a two-year Engineering Technology or related program. Of the Engineering Technology and related programs at BTC, five are well established and show strong completion numbers:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Engineering Technology</td>
<td>7</td>
<td>78</td>
</tr>
<tr>
<td>Electronics Engineering</td>
<td>18</td>
<td>69</td>
</tr>
<tr>
<td>Instrumentation &amp; Control</td>
<td>36</td>
<td>217</td>
</tr>
<tr>
<td>Mechanical Engineering Technology</td>
<td>19</td>
<td>114</td>
</tr>
<tr>
<td>Surveying/Geomatic Technology</td>
<td>5</td>
<td>58</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>85</strong></td>
<td><strong>505</strong></td>
</tr>
</tbody>
</table>

Two other Engineering Technology programs at BTC (including the Engineering Technology common core program) are recently established (Fall 2014), and therefore have not yet yielded completions. However, projected completion numbers are strong:

<table>
<thead>
<tr>
<th>Engineering or Related Specialty Program</th>
<th>Projected Completions (2015-2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composites &amp; Process Engineering Technology</td>
<td>10</td>
</tr>
<tr>
<td>Engineering Technology (core curriculum)</td>
<td>35</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>45</strong></td>
</tr>
</tbody>
</table>

There are more than 500 graduates of BTC’s Engineering Technology and affiliated programs who are currently eligible to enroll in the proposed BAS program. It is also expected that students from other programs in the state will also seek out and enroll in this program. Furthermore, by the end of 2015-2016, it is estimated that the Engineering Technology and related programs at BTC will be graduating approximately 130 students annually who are eligible to continue into the Engineering Technology BAS program.

1. Survey of students within region.

In a 2015 survey of 47 students in Engineering Technology and related programs at BTC, 91% indicated interest in earning a bachelor’s degree, 94% indicated they would consider earning a bachelor’s degree at BTC, and 91% indicated they would consider earning a bachelor’s degree in Engineering Technology at BTC.

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes/Maybe</th>
<th>Responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you interested in earning a bachelor’s degree after completing your associate’s degree?</td>
<td>43</td>
<td>47</td>
<td>91%</td>
</tr>
<tr>
<td>Would you consider earning a bachelor’s degree at BTC, if the college offered bachelor’s degree programs?</td>
<td>44</td>
<td>47</td>
<td>94%</td>
</tr>
<tr>
<td>Would you consider earning a bachelor’s degree in Engineering Technology at BTC?</td>
<td>43</td>
<td>47</td>
<td>91%</td>
</tr>
</tbody>
</table>

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15 Completions by program (2015), BTC Institutional Data.
16 Based on initial program enrollments, see Criteria 4.
2. Demand in excess of opportunity to enroll in similar bachelor’s programs.

In total, two bachelor’s programs similar to the proposed Engineering Technology BAS program are currently operating in the region, both through Washington Engineering Institute (WEI). However, WEI is a private institution with limited accreditation, no lab facilities, no financial aid opportunities, and a limited number of program students.

BTC’s Engineering Technology BAS program will represent a streamlined, alternative, step-out/step-in pathway to a baccalaureate for graduates of BTC and other two-year colleges, an option which is not currently available in the state. Many students in BTC’s Engineering Technology BAS degree will be former BTC graduates and incumbent workers, so the new program will also be designed for easy access by the working adult, with online and hybrid evening and weekend coursework for schedule flexibility.

As discussed in Criteria 3, baccalaureate-prepared Engineers and Engineering Technologists share the same labor data classification. With 440+ annual regional job openings estimated for Engineers and Engineering Technologists, and industry need for Engineering Technologists who have hands-on, applied design and product-testing skills and experience, BTC anticipates high demand for Engineering Technology BAS graduates. This program will address unmet regional demand for accessible, affordable, high quality baccalaureate-level Engineering Technology education, as well as contribute to satisfying statewide demand for qualified Engineering Technology personnel.

3. Changes in industry standards.

Many experts currently argue that the U.S. is producing too many traditional engineering graduates and underproducing what is currently most in demand by industry: Engineers with hands-on experience and a focus on applied learning, which is the core focus of four-year Engineering Technology programs. Research from the Washington State Employment Security department shows that in Whatcom County alone, businesses with less than 50 employees make up the majority of all employers, and employ over 50% of the county’s workforce. The small businesses that populate the county are vulnerable to economic fluctuations and industry competition, and cannot afford to hire personnel that do not have broad skill sets that will allow them to perform with greater efficiency and adaptability. These smaller businesses need Engineers to serve essential roles in planning, production development and design teams, but are seeking those who can provide a skill set that includes applied technical experience and knowledge. Engineering Technologists, with their focus on applied technical skills in areas such as advanced manufacturing and industrial processes, will be attractive to employers in the region; graduates of BTC’s Engineering Technology program will be perfectly suited to address this need. Furthermore, BTC’s program will be one of the only opportunities for graduates from two-year Engineering Technology programs to continue their education and complete a baccalaureate in two additional years. The college anticipates that many graduates of other two-year engineering programs from outside of BTC’s service region will also take advantage of this opportunity. In addition to serving local companies, BTC’s BAS in Engineering Technology will provide assistance in helping to meet a wider region’s workforce needs.

A degree in Engineering Technology is a comparable credential to a degree in Engineering for those pursuing careers in engineering at the baccalaureate-level. This claim is supported by the American Society of Mechanical Engineers (ASME), and illustrated by the pathway diagram provided by the ASME for those interested in entering the engineering workforce (Figure 5.1).

As in many fields, the advent of information technology resources and tools has transformed the engineering industry, allowing Engineers to speed up design and prototyping processes and spend more

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18 “Establishment Size by Number of Employees (2014),” ESD: https://fortress.wa.gov/esd/employmentdata/reports-publications/industry-reports/
time in modeling functions and testing analysis. Undergraduate Engineering students are increasingly diverse, and the Accreditation Board in Engineering and Technology (ABET) reflects changes that will encourage further diversification of the engineering and engineering technology workforce, adding an Applied Science Accreditation Commission (ASAC). The newly-created ASAC will offer accreditation for applied science programs at the associate, bachelor and master degree levels.

Furthermore, BTC anticipates that the majority of graduates of the BAS program will place into positions within the aerospace and manufacturing fields, for which the applied skills and training of an Engineering Technology program are critical. BTC faculty and staff working with the new Engineering Technology BAS will work closely with industry to ensure that students are working on industry-standard equipment, and that curriculum is effective in meeting workforce needs. The BAS program will involve capstone projects that will require industry-based experiences. All of these program elements will combine to produce graduates who are well prepared to enter the workforce and address a critical need both regionally and statewide.

Figure 5.1: Pathways Into The Engineering Workforce¹⁹

4. Enrollment projections for next five years.

Projected enrollment numbers, while significant in terms of predicted regional impact, remain conservative. These projections represent minimum baselines, and it is anticipated that enrollment in the Engineering Technology BAS program will exceed projections.

¹⁹ “Pathways Into The Engineering Workforce.” ASME: https://www.asme.org/career-education/k-12-students/pathways-careers-in-mechanical-engineering/which-path-will-you-take
Employers need baccalaureate-prepared Engineers who are skilled at conceptual design, and baccalaureate-prepared Engineering Technologists who are adept at applying technical skills to engineering issues in fields such as advanced manufacturing and aerospace. BTC will work with industry and educational partners to create this needed BAS program and ensure that workforce needs are met.

<table>
<thead>
<tr>
<th>Project Year</th>
<th>Projected Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-2017</td>
<td>15</td>
</tr>
<tr>
<td>2017-2018</td>
<td>25</td>
</tr>
<tr>
<td>2018-2019</td>
<td>30</td>
</tr>
<tr>
<td>2019-2020</td>
<td>40</td>
</tr>
<tr>
<td>2020-2021</td>
<td>40</td>
</tr>
</tbody>
</table>
As demonstrated in Criteria 3, the regional need for graduates from Engineering Technology programs is high. Engineering Technologists with extensive technical skill sets are needed to support the area’s high-demand and developing industries such as advanced manufacturing, aerospace, energy and bioTechnology. Employers, however, are struggling to find qualified Engineers for open positions. The region’s workforce issue is reflected statewide (as noted in Criteria 3), a substantial gap exists between the statewide production of engineering baccalaureates and employer need. Workforce supply gaps have been caused by an aging workforce and retirement of engineering personnel across all industries. This gap, coupled with projected increases in state and national workforce demand for engineers, make it essential to create effective pipelines for baccalaureate-prepared Engineering Technology students in northwest Washington State. With a unique mix of theoretical and technical skills, graduates from a BTC’s Engineering Technology BAS program will be strong potential candidates for the area’s Engineering Technology positions.

Students who complete two-year workforce degrees have very limited options to continue on for baccalaureate completion. A 2013 report by the State Board for Community and Technical Colleges showed that only six percent of all transfer students in the state completed a two-year “technical” degree prior to transfer. Traditional Engineering baccalaureate programs typically only accept general education courses in transfer and accept limited credits for non-academic technical courses in the field. However, the proposed BAS degree in Engineering Technology at BTC will allow students to seamlessly continue on to the baccalaureate level, applying a majority of prior college credit. BTC’s program will make it possible for graduates with professional-technical associate degrees to gain access to a baccalaureate in Engineering Technology that will allow them to study, work, and fulfill family responsibilities while simultaneously advancing their careers.

BTC will work closely with state educational partners, workforce organizations and industry groups to maintain collaborations where possible and foster conversations with employers through conferences, meetings, focus groups, advisory committee meetings, and skill panels. BAS staff and faculty will be actively strengthening and refining connections as they develop internships, perform task analyses, and form advisory and DACUM groups to help shape a two-year BAS curriculum for continuing students and incumbent workers. Employers and representative groups will continue to meet with program personnel and other partners to discuss ways to upgrade new and incumbent workers’ skill sets and increase the pool of individuals starting a pathway into engineering careers. All partners recognize that keeping this industry cluster healthy with a skilled workforce is vital for Washington’s Northwest Puget Sound region and the state.

Note: Faculty at WWU and BTC have been discussing the development of the BAS in Engineering Technology program since early fall 2014, and plan to continue working collaboratively to ensure that our two programs complement each other to serve students and industry in the best manner possible. Additionally, communications between Whatcom Community College (WCC) and BTC at both the Dean and Vice President levels have been occurring over fall (2014) and winter (2015) quarters, and BTC has pledged to make a viable pathway for WCC students to enter the proposed BAS program. Additionally, BTC plans to continue to offer a transfer option in Engineering Technology (AAS-T) to students who would like to pursue the more traditional Engineering pathway.

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20 “The Role of Transfer in the Attainment of Baccalaureate Degrees at Washington Public Bachelor’s Degree Institutions,” SBCTC: http://sbctc.edu/college/education/13-5TransferStudy_000.pdf
JOINT BACHELOR OF APPLIED SCIENCE IN 
TEACHER EDUCATION: ELEMENTARY EDUCATION & SPECIAL EDUCATION

Submitted 27 February 2015

By

Centralia College
600 Centralia College Blvd.
Centralia WA 98531

Grays Harbor College
1620 Edward P. Smith Dr.
Aberdeen WA 98520

GRAYS HARBOR COLLEGE
CENTRALIA COLLEGE
STATEMENT OF NEED Program Information

Institution Name(s): Centralia College and Grays Harbor College

Degree Name: BAS-Teacher Education: Elementary Education & Special Education CIP Code: 131001

Name(s) of existing technical associate degree(s) that will serve as the foundation for this program:

Degree: AAS-T Paraprofessional (Centralia) CIP Code: 131291 Year Began: 2002


Degree: AA – Education (Centralia) CIP Code: 130101 Year Began: 1993

Degree: AA – Education (Grays Harbor) CIP Code: 130101 Year Began: 2005

Proposed Start Implementation Date (i.e. Fall 2014): Fall 2016

Projected Enrollment (FTE) in Year One: 15 at Full Enrollment by Year: 2017

Funding Source: State FTE: GHC ☒ Self-Support: Centralia ☒ Other: ☐

Mode of Delivery

Single Campus Delivery: Centralia College and Grays Harbor College

Distance Learning: ITV, Online and hybrid

Statement of Need: Employer Demand, Student Demand, Options for place-bound students

Contact Information (Academic Department Representative)

Name: Cristi Heitschmidt JEB Thornton
Title: Dean of Child and Family Studies Assistant Dean of Transfer and Baccalaureate Programs
Address: 600 Centralia College Blvd., 1620 Edward P. Smith Dr.,
Centralia WA 98531 Aberdeen WA 98520
Telephone: 360-736-9391, ext. 654 360-538-4022
Fax: 360-330-7113 360-538-4299
Email: cheitschmidt@centralia.edu jthornto@ghc.edu

John Martens Vice President, Instruction
Date 26 March 2005

Laurie Kaye Clary Vice President, Instruction Date
Introduction

Centralia College and Grays Harbor College seek approval to offer a joint Bachelor of Applied Science in Teacher Education with endorsements in Elementary Education and Special Education beginning in the fall 2016. Centralia and Grays Harbor Colleges have come together to overcome a common need for a robust, stable, and affordable elementary education program through a jointly proposed Bachelor of Applied Science in Teacher Education. The Joint BAS-TE is derived from the demands of our communities, to serve their educational needs and is a very important step in the development of the colleges’ ability to serve our communities to a greater extent. This degree will meet the specific “diverse needs of our communities,” which have been identified through local research. The proposed BAS-TE will help address employer demand for educators and educators with special education credentials.

One purpose of the BAS-TE degree is to provide a career ladder for current paraprofessionals to have more opportunities for advancement within their school district. The attainment of the BAS-TE and advancement to a certificated teaching position would provide a higher wage and provide paraprofessionals and their families a higher standard of living. Moreover, “growing our own” takes advantage of the knowledge of staff who understand the local culture and can work effectively within it, providing a better outcome for all children including those with special needs.

In addition to paraprofessionals, the BAS-TE degree will provide a pathway for students who have an AA degree in Education, an AA in Early Childhood Education or other education concentrated degrees. The endorsements contained in the BAS-TE degree will also provide additional credentialing opportunities for existing certified teachers.

With working professionals, it is important to provide education in a time and place that allows for continued employment while pursuing educational goals. The BAS-TE program will provide instruction through ITV, hybrid and limited online classwork with the availability of intensive weekend and summer classroom instruction. This blend of instruction, outside of standard K-12 educational hours, will allow the students to continue working in their current profession while progressing in their education.

If approved, this degree would increase opportunities for place-bound students, many of whom are working adults in our area. Place-bound working adults will benefit from having a baccalaureate program that provides quality education without having a long commute, the need to relocate, or decreased income by having to limit their current work hours. Local employers will benefit from having a local, skilled workforce to fill open positions.

The proposed BAS-TE degree program is designed to provide a rigorous educational experience that fulfills the program’s mission:
To graduate individuals who are well-grounded in education and training and are prepared to obtain initial teaching certification in the state of Washington with primary endorsements in elementary education and special education.

The programs outcomes include:
- Communicate and collaborate effectively with children, parents/guardians, peers, administrators and the community
- Recognize individual difference and learning styles and modify activities to meet the learners needs
- Design, facilitate, and evaluate age and developmental appropriate learning exercises for students in K-8 and special education
- Utilize the use of formal and informal assessment strategies to strength instruction and promote learning
- Demonstrate a high level of competence in literacy, science, math, social studies and the arts
- Generate strategies from multiple instructional approaches for special education students
- Foster positive, inclusive, learning settings in cognitive, behavior, language, physical and social domains.
- Integrate and model the use of current technology in the classroom
- Utilize feedback and reflection to constantly improve teaching practices.

In addition to addressing industry demand, the BAS-TE program aims to help achieve the priorities articulated by the Washington State Board for Community and Technical Colleges (SBCTC). Specifically, this degree supports goals one and four:
- Contribute more to the production of baccalaureate degrees
- Increasing educational pathways for professional technical degree graduates who have been limited in their ability to apply credits form these “terminal” degrees toward a bachelor’s degree at a four-year college or university.

**Statement of Need – Criteria #1**

<table>
<thead>
<tr>
<th>Criteria 1</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship to institutional role, mission, and program priorities.</td>
<td>Describe how the proposed program reflects and supports the role and mission of the institution, and reflects program priorities.</td>
</tr>
</tbody>
</table>

RCW 28B.50.20 establishes the purpose of the community and technical college systems. In its interpretation of its role under 28B.50.20, Centralia College has adopted a broad mission statement and three core themes that further define this mission.

**Centralia**

Joint Centralia and Grays Harbor Colleges BAS-Teacher Education: Special Education
Mission Statement
Improving peoples’ lives through lifelong learning

Core Theme 1: Access, Diversity, Persistence
Centralia College shall make the benefits of higher education accessible by enrolling a wide range of students including people who have been traditionally underserved, by progressing and graduating a significant number of students, and by making its educational offerings as affordable as possible.

Core Theme 2: Educational Programs
Centralia College shall provide to our greater community an ever-increasing number of educated people having the knowledge and skills to become lifelong learners and productive and responsible citizens, more capable of realizing their highest human potential.

Theme 3: Stewardship
Centralia College shall serve as a model of effective stewardship to the citizens of Washington State by prudently managing resources, providing training and qualified college employees, and by continuously implementing sustainability best practices.

Each of the Core Themes has a set of measureable outcomes that have been adopted by the board of trustees. This year the board of trustees adopted core theme 2.8.

Core Theme Objective 2.8: Baccalaureate Degrees (Board adopted 14 August 2014)
Centralia College shall increase access to the benefits of higher education by offering applied baccalaureate degrees that are responsive to need and accessible to students completing technical associate degrees. Program success will be based on post-graduation student employment, salary, and advancement.

Centralia College is the nexus of higher education in District 12, Lewis and south Thurston Counties, brokering and offering opportunities for higher education to the citizens of our essentially rural service district. It is the mission of the college to provide accessible, high-quality educational programs that lead to intellectual growth and meaningful employment. A local BAS-Teacher Education (BAS-TE) degree with endorsements in Elementary Education and Special Education and offered at BAS tuition rates fills a gap in our educational offerings and meets the affordability requirement for those seeking to attain a bachelor’s degree.

Centralia College’s vision is “to be an economic driver in our local economy.” Lewis County currently and historically has one of the highest unemployment rates in the state. According to the Employment Security Department for Washington State, the August 2014
unemployment rate for Lewis County is 8.5 percent compared to the state average of 5.7 percent. All counties, except Thurston County, that neighbor Lewis County also report unemployment rates significantly higher than the state average.

**Grays Harbor College**

In 1930, Grays Harbor College (GHC) opened and responded to the educational needs of the Grays Harbor and Pacific counties. The College is accredited by the Northwest Commission on Colleges and Universities and is directed by GHC Board of trustees. The Board has developed and adopted the College’s Vision and Mission statements, which read as follows:

**VISION STATEMENT** - Grays Harbor College is a catalyst for positive change.

**MISSION STATEMENT** - Grays Harbor College provides meaningful education and cultural enrichment through academic transfer, workforce preparation, and service to community.

The BAS-TE at GHC addresses academic transfer, workforce preparation and provides service to the community as outlined in the mission statement. It is through showing transfer students a complete path from basic education all the way through a baccalaureate degree at GHC, that a four-year degree becomes a real option. The BAS-TE provides place-bound students an education beyond the associate level, which is tailored to their community. The BAS-TE would also be the next educational stepping-stone for many of our students who wish to go on.

The Joint BAS-TE is derived from the demands of the community, to serve the educational needs of the community. The proposed BAS-TE is a very important step in the development of the College and its ability to serve our community to a greater extent. This degree will meet the specific “diverse needs of our communities,” which have been identified through a local research. The BAS-TE is intended to grow the economic well-being of Grays Harbor and Pacific counties, as well as the state as a whole.

The joint BAS-TE program clearly falls within the vision and mission statements of both Colleges, and is a clear missing link in the local education system.

Wage and income for both Counties lag state and national averages. The Lewis county per capita annual average wage $22,212 and for Grays Harbor county it is $21,828, which can be compared to the state average of $30,742. The mining industry continues to have the highest level of wage in the areas. The median hourly wage for each county is $17.98 for Lewis, and $18.30 for Grays Harbor, which placed the counties below the statewide average of $21.64. There is a large percentage of residents in both counties living below the poverty level, with 15.4% in Lewis, and 19% in Grays Harbor, again compared to the state
average of 13.4%. The economic barriers of the area further indicate the need for high levels of education to support better paying job opportunities. (*Employment Security Department; Bureau of Labor Statistics; Bureau of Economic Analysis; U.S. Census Bureau; U.S. Census Bureau, American Community Survey*)

Historically, both counties have relied on natural resource extraction industries to provide living wage jobs. With the decline in the timber industry throughout the past 30+ years and the compounding loss of mining opportunities with the closing of the TransAlta coal mine in 2006, the relative average wage in Lewis County has also declined. Grays Harbor County has a similar story, with an economy based on timber and fishing, both of which have declined. The Bureau of Economic Analysis chart below shows the Lewis County per capital income relative to the state average over the past 40 years.

![Lewis, Per capita personal income (adjusted) percent of state average](chart.png)

Affordability - The cost of college is a barrier for students with limited financial resources. The students attending Centralia and Grays Harbor colleges are among the lowest income students in the state. Recently released student income data from the SBCTC breaks community college student income levels in to five levels from high to low. Centralia and Grays Harbor College have the largest number of students in the two lowest quintiles in the state (at 81% and 83% respectively).

Affordability is not just in fiscal costs involved in college, it relates to time as well. Low-income students are affected by the *affordability of time*. For example, 36% of GHC students commute an hour or more to come to college. To consider adding another hour or two a day to go to the 4-year institution in Olympia, simply costs too much time. The lost time has expense of its own, in lost wages and as well as the high cost of childcare. In considering options BAS-TE students must consider more than tuition, as they have a number of other costs.

One purpose of the BAS-TE degree is to provide a career ladder for current paraprofessionals to have more opportunities for advancement within their school district. According to emsi data, the median hourly earnings for teacher assistants in Lewis County are $12.73 ($13.26 in GHC). The attainment of the BAS-TE and advancement to a certificated teaching position would provide a higher wage and provide paraprofessionals and their families a higher standard of living. The median hourly earnings for special education teachers in Lewis County is $25.29 ($26.79 in GHC), which is a significant
increase from the median hourly earnings of a paraprofessional. (emsi, retrieved June 18th and 24th 2014)

Moreover, “growing our own” takes advantage of the knowledge of staff who understand the local culture and can work effectively within it, providing a better outcome for all children including those with special needs.

In addition to paraprofessionals, the BAS-TE degree will provide a pathway for students who have an AA degree in Education, an AA in Early Childhood Education or other education concentrated degrees. The endorsements contained in the BAS-TE degree will also provide additional credentialing opportunities for existing certified teachers.

With working professionals, it is important to provide education in a time and place that allows for continued employment while pursuing educational goals. The BAS-TE program will provide instruction through ITV, hybrid and limited online classwork with the availability of intensive weekend and summer classroom instruction. This blend of instruction, outside of standard K-12 educational hours, will allow the students to continue working in their current profession while progressing in their education.

A local Joint BAS-TE degree would fill the gap in colleges’ educational offerings while meeting the need of keeping an undergraduate degree affordable and attainable for those living in a rural area who strongly want to remain living in the area and further their educational and earning potential.

Program Priorities
The BAS-TE is designed to provide a rigorous educational experience that fulfills the program’s mission:

To graduate individuals who are well-grounded in education and training and are prepared to obtain initial teaching certification in the state of Washington with primary endorsements in elementary education and special education.

The programs outcomes include:
• Communicate and collaborate effectively with children, parents/guardians, peers, administrators and the community
• Recognize individual difference and learning styles and modify activities to meet the learners needs
• Design, facilitate, and evaluate age and developmental appropriate learning exercises for students in K-8 and special education
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- Demonstrate a high level of competence in literacy, science, math, social studies and the arts
- Generate strategies from multiple instructional approaches for special education students
- Foster positive, inclusive, learning settings in cognitive, behavior, language, physical and social domains.
- Integrate and model the use of current technology in the classroom
- Utilize feedback and reflection to constantly improve teaching practices.

The Centralia and Grays Harbor Colleges' BAS-TE reflects and supports the role and mission of the colleges and its attainment has been designated a priority by the colleges' boards of trustees for the coming year. The joint BAS-TE will not only provide students with the training they need to be elementary educators yet will also provide them the training needed to receive an endorsement in special education allowing them to work effectively with and provide quality instruction to special education students as well. According to Professional Educator Standards Board (PESB) "As a general rule, teachers with multiple endorsements are more likely to be hired, in particular those who have the special education endorsement." (data.pesb.wa.gov/production, retrieved November 24, 2014). Based on the hiring prediction tool of PESB (see graphics below) an elementary education and special education endorsement are approximately twice as likely to be hired as a teacher with only elementary education. This holds true for teachers who are prepared from out of state as well as in state institutions.

**Special education**

Below are two screen shots from the hiring prediction tool.

![Elementary Education AND Special Education](image)

- **OUT OF STATE**
- **Likelihood of hired**
- **Years until hired**
- **Next**, **Two**, **Three**, **Four**, **Five**, **Five+**
In summary, the proposed Joint BAS-TE program is well aligned with both colleges’ mission and priorities. It provides the opportunity to improve the graduates’ economic prospects and is a step in the progression of life-long learning. It is aligned with the colleges’ vision of being an economic driver in the economy.

<table>
<thead>
<tr>
<th>Criteria 2’</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support of the statewide strategic plans.</td>
<td>Describe how the program will support SBCTC Mission goals outlined in the Mission Study and WSAC policies and goals for higher education as articulated in the Strategic Master Plan for Higher Education.</td>
</tr>
</tbody>
</table>

**BAS-TE Aligns with SBCTC Mission Goals**

Through the SBCTC Mission Study, several goals were identified as part of a Twenty-Year Action Plan that address needs relating to economic demand, student success, and innovation. Two specific goals identified in the action plan are directly supported by the BAS-TE program: (4) Contribute more to the production of baccalaureate degrees, and (9) Promote the adoption of web-based and mobile technology tools for eLearning and online student services.

**BAS-TE Addresses WASAC Policies and Goals**

This program addresses Step I of the WSAC Strategic Master Plan Update 2012 which is to “Increase capacity of higher education to serve more students.”

**BAS-TE Will Help Fulfill Statewide Needs**

Following the passage of the Legislature’s Substitute House Bill 2655 in 2010, ramped up WA CTC efforts have resulted in applied baccalaureate degree program enrollments of 729 headcount, and 475 FTE for 2013 (SBCTC). WA CTC baccalaureate programs have increased enrollments of historically underserved students in the CTC system and

Joint Centralia and Grays Harbor Colleges BAS-Teacher Education: Special Education
increased wages for graduates. While this is a big step in the right direction, it leaves substantially more work to be done toward meeting the Washington state goal of increasing the total number of baccalaureate degrees awarded to 42,400 per year by 2019 (Kaikkonen, 2013).

In addition, the Legislature’s 2014 Substitute Bill 6129, mandates colleges create “a paraeducator career ladder and an articulated pathway for teacher preparation and certification.” The current entrance requirements for a paraprofessional in a Title I school is a high school diploma or GED and one of the following: at least two years of study at an institution of higher education; obtain an associate (or higher) degree; meet a rigorous standard of quality and can demonstrate, through a formal state or approved local academic assessment a) knowledge of, and the ability to assist in instructing reading, writing, and mathematics or b) knowledge of and the ability to assist in instructing reading readiness, writing readiness, and mathematics readiness as appropriate (OSPI). When passing the WEST-B was approved as an entrance requirement, the number of paraprofessionals obtaining the AAS-T Paraprofessional degree declined dramatically.

In a report to the Education Committees of Washington State Legislature dated January 7, 2015 the following recommendation was outlined:

“Recommendation 8: Establish three regional grants to expand and enhance current Alternate Routes to Certification to meet teacher shortage in hard to fill areas. Rationale: Over 38% of paraeducators have earned AA degrees or hold a BA degree, which allows them to qualify for Alternate Routes to Certification – Routes 1 and 2. In order to encourage paraeducators to enroll in Alternative Route programs, our recommendation is to enhance the Alternate Routes to Certification by encouraging school districts to support a partnership with community and technical colleges or four-year universities through state-funded grants awarded to provide employment, scholarship, and coaching to paraeducators completing Teacher Certification.”

“Recommendation 12: The Professional Educator Standards Board (PESB) and the State Board of Community and Technical Colleges (SBCTC) shall explore the feasibility of piloting a BAS degree program leading to teacher certification in Elementary Education and English Language Learners or Special Education at one or more community and technical colleges.”

Centralia College’s existing Paraprofessional AAS-T, and the proposed BAS-TE degree, directly addresses the Legislative mandate by providing a local option for students who are place bound or seeking a more affordable program. Centralia College is developing prior learning assessments and/or competency based assessments for current paraprofessionals to earn credit for work experience so they do not have to begin the program by taking lower division classes that their work experience demonstrates they have already mastered. This will save the students time and money in earning their AAS-T
Paraprofessional degree and shorten the career path to the BAS-TE degree and ultimately teaching certification.

Grays Harbor College graduates roughly 50 students a year with an educational intent code, yet few continue into a 4-year elementary education programs.

Students wishing to obtain a Washington state teaching credential must take preparatory classes through a program approved by the Washington Professional Educator Standards Board (PESB). Centralia and Grays Harbor Colleges will work in conjunction with the PESB to obtain curriculum and program approval.

<table>
<thead>
<tr>
<th>Criteria 3</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer/community demand for graduates with baccalaureate level of education proposed in the program.</td>
<td>Employer demand must exceed regional supply of graduates with relevant degrees. Demand must be based on data sources including but not limited to local employer survey, traditional labor market data, industry data, trade association data, and other transactional data. Please provide evidence of the gap between the number of program graduates versus the number of job openings locally and regionally.</td>
</tr>
</tbody>
</table>

**Employer/community demand for graduates with baccalaureate level of education proposed in the program.**

The joint BAS-TE would provide quality teachers for a five county area. There is no program like this serving the Lewis, Thurston, Pacific, Mason, and Grays Harbor counties.

Centralia and Chehalis school districts coordinate special education through the Centralia-Chehalis Special Education Cooperative. The remaining eleven school districts are small and more rural and rely on ESD 113 for special education needs. In a letter of support from the Chehalis-Centralia Student support Cooperative, director Loretta Schade-Duncan states, “In the past few years we have had a difficult/challenging time finding qualified special education staff, in addition to trying to attract them to our area to work. At the present time we still have special education teaching position unfilled.” Mary Lou Bissett, Assistant Superintendent for Chehalis School District states, “This year, the Chehalis School District could employ two additional highly qualified special education teachers at the secondary level. With the new highly qualified rules in place it is very difficult to find special education instructors.”
Districts were asked to provide the number of special education and elementary education teachers they have hired in the last five years and their projections of hiring need to the next five years. This information is compiled in the tables below. During this process, the concern of not having rich candidate pools, positions remaining unfilled and/or filled with underqualified candidates was a reoccurring comment. Our districts are desperate for qualified educators to fill critical positions in our rural school districts. Centralia/Chehalis Special Services, representing the largest special education need in our district, stated “there are currently positions in both school districts for qualified special education staff, these positions have not been filled and districts are utilizing subs that are not qualified.” In addition to the K-12 classrooms, the Centralia/Chehalis districts have 11 special education preschool classrooms that require a certified Special Education Teacher for each classroom. The Grays Harbor and Pacific county data was collected from district superintendents in the six districts (representing 66% of the total headcount).

**District hiring from 2010-2014**

<table>
<thead>
<tr>
<th>District</th>
<th>Special Education Teachers</th>
<th>Elementary Ed. Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centralia Area Districts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adna</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Onalaska</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Rochester</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>Mossyrock</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Centralia</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>Napavine</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Toledo</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Grays Harbor and Pacific County Districts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aberdeen</td>
<td>19</td>
<td>36</td>
</tr>
<tr>
<td>Hoquiam</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Montesano</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Raymond</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Cosmopolis</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Ocosta</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Longview School District*</td>
<td>59</td>
<td>104</td>
</tr>
</tbody>
</table>

*Longview School District is experiencing a trend upwards in hiring. In 2010 they hired one elementary education and five special education teachers compared to 42 and 19, respectively in 2014.

**District projected hiring 2015-2020**
<table>
<thead>
<tr>
<th>District</th>
<th>Special Education Teachers</th>
<th>Elementary Ed. Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centralia Area Districts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adna</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Rochester</td>
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<tr>
<td>Centralia</td>
<td>15</td>
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<td>Napavine</td>
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<td>6</td>
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<tr>
<td>Toledo</td>
<td>4</td>
<td></td>
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<tr>
<td>Grays Harbor and Pacific County Districts</td>
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<td></td>
</tr>
<tr>
<td>Aberdeen</td>
<td>12</td>
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<tr>
<td>Hoquiam</td>
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<tr>
<td>Montesano</td>
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</tr>
<tr>
<td>Raymond</td>
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<td>3</td>
</tr>
<tr>
<td>Cosmopolis</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Ocosta</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

The data from the six districts Grays Harbor and Pacific counties is extrapolated to represent the total demand for all 16 (a total of 11,568 students) in the table below.

<table>
<thead>
<tr>
<th>Grays Harbor and Pacific Counties</th>
<th>Special Education</th>
<th>Elementary Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Districts</td>
<td>From 6 Representing 16</td>
<td>From 6 Representing 16</td>
</tr>
<tr>
<td>Hiring from 2010-2014</td>
<td>35</td>
<td>52</td>
</tr>
<tr>
<td>District projected hiring 2015-2020</td>
<td>26</td>
<td>39</td>
</tr>
</tbody>
</table>

Tom Opstad, Superintendent of Aberdeen school district stated, “Our districts (Grays Harbor and Pacific counties) serve about 11,568 students each year. Given an average class size per teacher of 24, which would be 482 teachers.” When asked about a turn-over rate, he went on to say, “I would suggest that 5-6% would be a reasonable since there is a variance based on the retirement age of employees.” Take 482 teachers’ times 5.5% and there is a demand of 27 teachers a year.

Based on data from the Employment Security Department, Elementary School Teachers are in demand for Pacific Mountain WDA: Grays Harbor, Lewis, Mason, Pacific, and Thurston counties. Data indicate the short and long-term trend toward growth with an average annual growth rate (2012-2022) of 1.3 percent which equates to 70 annual openings.

PESB’s annual report indicates, on average, more than 39 new special education and elementary education teachers are hired per year in Grays Harbor and Pacific county’s service district and 22 per year are hired within Centralia College’s service district. This
joint BAS-TE degree will allow local colleges to supply the graduates needed to fill local need.

Special education teachers, kindergarten and elementary school are also in demand in the region with an average annual growth rate of 1.3 percent which equates to seven annual openings. There are currently an estimated 224 employed special education teachers in the region in 2012.

Regional trends for special education teachers in Lewis County indicates a 2.9 percent growth, one job, from 2012 to 2013 with a consistent increase projected through 2024. However according to Rebecca Turnbull, Director, Lewis County Special Education Cooperative for ESD 113, “This year, our 13 school districts had to fill 12 special education teacher openings; four of the teachers did not have an endorsement in special education. We anticipate at least four more open positions for the upcoming school year and are very concerned about the pool of applicants who might be willing to work in one of our rural, Lewis County school districts.” In addition to the current “weak” applicant pools for open positions, fifty-five percent of special education teachers in Lewis County are between the ages of 45-64 and it will be important to prepare new graduates to replace upcoming retirements (emsi, retrieved June, 2014). Based on results from the NCES Teacher Follow-up Survey 2007-2008, indicate that SPED teachers exited the profession at higher rates (12.3 percent) than any other assignment field (CEDR report).

Although the median wage for special education teachers is relatively low $21.75-$25.29, the wage is significantly higher than the median wage of $17.57 of Lewis County residents, and Grays Harbor residents at $18.30.

**Lewis County job trend for special education (emsi data 7/17/2014)**

![Graph showing percent change from 2012 to 2024.](image-url)
Data is also showing an increase in jobs in neighboring Thurston County with a current increase of 4.9 percent from 2013 to 2014 and a continued upward trend that exceeds the expected national trend.

**Thurston County Regional Trend compared to state and nation (emsi data 7/17/2014)**

Based on the Center for Education Data & Research (CEDR) report “The STEM and Special Education Teacher Pipelines: Why Don’t we See Better Alignment Between Supply and Demand?” published in 2014 states “Special Education (SPED) is another area where staffing problems are acute.” The report also states that “the evidence presented..., if the criterion for picking a specific area of training is the prospect for future employment, one would choose STEM or SPED over other areas in which to specialize.” Additionally, the report indicates that “it seems likely that the limited supply of such teachers contributes to staffing problems in Washington State.” This statement supports the testimony received when speaking to local school districts and continues to suggest that the shortage
discussed in the “educator Supply and Demand in Washington state 2006, Spring 2007” is still relevant. According to the PESB, a person with an elementary endorsement has about a 50 percent chance of being hired in Washington within five years. However, having a special education endorsement in addition improves the candidate’s changes by about 20 points. Simply stated, candidates with an endorsement in special education has a higher likelihood of obtaining employment.

- Special education was one of the top five endorsements on first-issue teaching certificate during 2008-2009 (second only to elementary education)
- Special education was one of the highest placement rates.
- “The state-identified teaching shortage areas for 2007-09 include: special education…”
- Employment rate for teachers with special education endorsements was 87.4 percent.

The “Educator Supply and Demand in Washington State 2006 Report, Spring 2007” (most recent report) shows:
- “A recruitment/retention shortage” occurs when too few candidates are attracted to a particular subject area or role or too many leave in a short period of time (often because it is seen as too stressful or difficult.) This appears to be the case with special education, where the number of individuals entering the field has decreased over time and annually falls far below the number of openings. This shortage persists even though 18 of Washington’s 21 approved teacher preparation programs offer preparation in special education. The implication is that policy initiatives in this area should probably focus on the incentives and disincentives that affect entry into the field.”

Occupation data show, in Washington state, a change of 14 percent in jobs in special education teachers, preschool and a 3 percent increase in special education teachers, kindergarten and elementary school from 2012 to 2013 (emsi).

<table>
<thead>
<tr>
<th>Occupation</th>
<th>2012 Jobs</th>
<th>2013 Jobs</th>
<th>Change</th>
<th>Percent of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Education Teachers, Preschool</td>
<td>486</td>
<td>553</td>
<td>67</td>
<td>14%</td>
</tr>
<tr>
<td>Special Education Teachers,</td>
<td>2,819</td>
<td>2,893</td>
<td>74</td>
<td>3%</td>
</tr>
</tbody>
</table>

Joint Centralia and Grays Harbor Colleges BAS-Teacher Education: Special Education
<table>
<thead>
<tr>
<th>Kindergarten and Elementary School</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Education Teachers,</td>
<td>1,179</td>
<td>1,192</td>
<td>13</td>
<td>1%</td>
</tr>
<tr>
<td>Middle School</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CareerInfonet: Special Education Teachers, Kindergarten and Elementary School, expected increase from 2012 to 2022 in Washington is +12 percent compared to +6 percent for the rest of the nation.

According to WOIS, “positions in rural and inner cities are most plentiful” (http://www.wois.org/use/occsv/viewer.cfm?occnum=100455#eo).

It is also noteworthy that Lewis and South Thurston Counties have a higher number of students identified as needing Special Education services than the rest of Washington state (OSPI Report Card).

**The current lack of higher education attainment in the Five county employment pool impacts both employers and the vitality of the community and quality of life for its residents.**
Because there are not enough educated teachers to fill current and projected demands in teacher education, special education schools will not be able to effectively meet the needs of their students. The BAS-TE will supply the local workforce and improve the lives of Lewis County residents.

In 2014, OSPI report cards indicate 10,829 students enrolled in Lewis County. The same year Grays Harbor and Pacific counties enrolled 10,715 students. The Centralia area reported 15% of the student population as special education students, while the percentage for GH and Pacific was 16.4%. Data from 2010-2014 shows overall enrollment has increased by 400 students with 24.75 percent of the increased student population requiring special education. The K-12 school districts located in Centralia College’s service district have a special education population that either meets the state average of 12.6 percent or exceeds the state average 1-5 percent. In order to provide a quality education for this population, more special education teachers who want to live in a rural area are needed.
<table>
<thead>
<tr>
<th>Criteria 4</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied baccalaureate program builds from existing professional and technical degree program offered by the institution.</td>
<td>Describe the existing professional and technical degree program that will be used as the foundation for the applied baccalaureate program. How long has the program been in existence? What has been the enrollment history of the program over the past five years?</td>
</tr>
</tbody>
</table>

**Applied baccalaureate program builds from existing professional and technical degree program offered by the institution.**

Centralia and Grays Harbor Colleges will create a seamless transition for BAS-TE students allowing a variety of existing program graduates to transfer directly into the BAS program.

Below are the completion rates from 2009-2014 of programs offered through Centralia College, and South Puget Sound Community College that would provide workforce pathways to the BAS-TESE.

In addition, Centralia and Grays Harbor Colleges are developing prior learning assessments and/or competency based assessments for current paraprofessionals to earn credit for work experience so they do not have to begin the program by taking lower division classes that their work experience demonstrates they have already mastered. This will save the students time and money in earning their AAS-T Paraprofessional degree and shorten the career path to the BAS-TE degree and ultimately teaching certification.

Tracking community college students with an elementary education or special education academic intent has been a challenge. Neither Centralia nor GHC have a mechanism to specifically track these students. Instead, college completions in feeder programs have been used to identify possible participants for the BAS-TE program.

At Centralia there are currently 127 education advisees. Fifty-seven of the advisees are coded as AAS or AAS-T students. The remaining 70 students would be AA students. Using Centralia College’s 2011 graduation rate of 34%, it is estimated that 24 students will obtain an AA in Education. Replicating Centralia’s process, GHC has identified 18 students a year could feed into the BAS-TE program.

**Colleges’ completions:**

<table>
<thead>
<tr>
<th>Centralia AAS Early Childhood Education</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centralia AAS-T Early Childhood Education</td>
<td>9</td>
</tr>
<tr>
<td>Centralia AA Education</td>
<td>24**</td>
</tr>
<tr>
<td>Grays Harbor College AA Education</td>
<td>18***</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
</tr>
</tbody>
</table>
**Centralia College completions, taking the 70 remaining AA students and multiplying by Centralia Colleges 2011 graduation rate of 34%, it is estimated that 24 students will obtain an AA in Education.

*** GHC has 54 current AAED students and using a graduation rate of 34%, GHC 18 students graduating a year can be identified.

Demand at GHC - In thinking about demand for the BAS-TE program, there is much more to the story than the 18 students recently identified, yet this requires a look back.

In 1998, WSU started a teaching cohort at GHC, using college faculty, local resources, and WSU staff. The program was successful for 11 years. In 2009, in the midst of an economic downturn, WSU withdrew from GHC. Shortly after, WSU-Vancouver began a teaching program at GHC. In 2011, the WSU-V teaching program ended at GHC. Since then GHC has had City University offering periodic teaching cohorts, with a part-time staff member. The result of having an under-supported, higher priced, and less reliable elementary education option at GHC has resulted in fewer students pursuing the academic preparatory pathway for elementary education.

After 5 years of a less than robust and more expensive 4-year option for students seeking a teacher education program, demand has become less apparent. The drop in AAED students is attributed to not having a program GHC’s advisers can get behind. Looking at the years when the college had a strong and affordable option for students, demand was much greater. For example, in 2010 there were 223 students with an AAED intent code and today there are 54.

Taking a step back, and to get a somewhat broader image of the number of student interested in pursuing an education vocation, we can look at the college placement test at GHC. Seven percent of the students who provided an academic intention on the college placement test indicated an educational career direction. The BAS-TE students are there at GHC, they just need to see a realistic pathway to pursue.

<table>
<thead>
<tr>
<th>Criteria 5</th>
<th>Standard</th>
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<tbody>
<tr>
<td>Student demand for program within the region.</td>
<td>Evidence of student interest and demand from multiple sources, such as but not limited to: Students graduating with technical associate degrees in the region, survey of students within region, demand in excess of opportunity to enroll in related traditional bachelor’s programs, and changes in industry standards. Provide enrollment projections for each year over the next five years.</td>
</tr>
</tbody>
</table>
Student demand for program within the region.

Centralia College conducted a preliminary survey of interest in June 2014. A survey was distributed to 235 students currently enrolled at Centralia College as well as local school district paraeducators. One hundred and thirty (55%) responded with the following results:

- Results of student demand for this program indicate that 50 percent of currently-enrolled students are personally interested in getting into a teaching position that requires a bachelor’s degree.
- Thirty-eight percent of currently-enrolled students told us they were likely to enroll in the program within the next two to five years.

Lewis County has more than 200 paraeducators, with approximately 50 substitute paraeducators. Forty-five paraeducators responded to the survey.

- Results of Lewis County paraeducators demand for this program indicate that 40 percent of paraeducators are personally interested in getting into a teaching position that requires a bachelor’s degree.
- Thirty-six percent of paraeducators told us they were likely to enroll in the program within the next two to five years.
- Combined, 46.60 percent of respondents are personally interested in getting into a teaching position that requires a bachelor’s degree.
- Combined, seventeen respondents told us they were likely to enroll in the program within the next two to five years.

“Educator Supply and Demand in Washington State 2006 Report, Spring 2007” (most recent report) states:

- “Distribution shortages tend to occur because graduates of preparation programs (which are predominantly in urban areas) are often placebound – unwilling or unable to move because of spousal employment, family connections, or similar reasons. Others may choose to stay put because they prefer an urban lifestyle. Distribution shortages can be difficult to address, although one policy option might be “grow your own” programs that deliver preparation programs to prospective teachers who already live in non-urban areas. These individuals would be more likely to remain in the area once they have completed their program.”

Five year enrollment

We will start the program by offering a starting point in the program every two years rather than every year. The chart below includes projected enrollment for the first five-
years of the program. The majority of the program will utilize hybrid courses hosted through ITV.

One of the advantages of a joint program is flexibility. The program would start with 12 students from each college. Depending on the level of demand, the program could quickly go to yearly cohorts, and then drop back to alternating year cohorts as demand dictates.

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<tbody>
<tr>
<td>24 (1st group starts)</td>
<td>20 (continued from previous year)</td>
<td>25 (2nd group starts)</td>
<td>20 (continued from previous year)</td>
<td>25 (3rd group starts)</td>
</tr>
</tbody>
</table>

Attempts have been made to form partnerships with state 4-year institutions, yet none of these have remained stable. GHC was in partnership with WSU beginning in 1998, and for 11 years, the partnership worked. During the budget cut year of 2009, WSU ended the program. For a short time, WSU-V filled the gap left by WSU, yet in 2011 they left. GHC has been in partnership with The Evergreen State College and Central Washington University in other academic areas, yet neither institution is interested in developing a partnership in elementary education.

<table>
<thead>
<tr>
<th>Criteria 6</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efforts to maximize state resources to serve place-bound students.</td>
<td>Describe how the program will serve place-bound working adults.</td>
</tr>
<tr>
<td></td>
<td>Identify similar programs offered by public or independent institutions in the region.</td>
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<tr>
<td></td>
<td>Describe options that have been explored for collaboration with other public baccalaureate institutions, businesses, and/or community organizations considered in the development of the proposal. Describe unique aspects of the proposed program that differentiate it from similar programs and/or describe why expansion of an existing program would be desirable or necessary.</td>
</tr>
</tbody>
</table>

**Efforts to maximize state resources to serve place-bound students.**

The Five county area does not contain state funded baccalaureate level elementary education or special education program. Students who wish to complete an affordable 4-year degree in elementary education have three options. 1) Leave the area to complete a degree. 2) Drive 2 to 4 hours each way to attend a college outside of the area. 3) Pay private college tuition rates.
Attempts have been made to form partnerships with state 4-year institutions, yet none of these have remained stable. GHC was in partnership with WSU for 11 of years. During the budget cuts years 2009, WSU ended the program. For a short time WSU-V filled the gap left by WSU, yet in 2011 they left. GHC has been in partnership with The Evergreen State College and Central Washington University in other area, yet neither institution is interested in developing a partnership in elementary education.

City University and St. Martin’s University offer education degrees on Centralia College’s campus. Therefore, we have had conversations with both City University and St. Martin’s University concerning the development of this degree. City University is not opposed to Centralia College offering this degree. The majority of student enroll in Elementary or Secondary education degrees. In the past two years, 3 of 15 students were interested in a special education degree. City University does not feel a competitive spirit from Centralia College offering this degree. We also discussed ways to the two institutions might partner. Specifically addressing endorsements and coursework needed in order to offer a variety of endorsements. In the marketing and recruiting City University does, they see 20-40 paraprofessionals from school districts during information sessions. City University provided a caution regarding sustainability, noting that in Skagit Valley the area “ran out of” para educators after 2-years of offering a Special Education degree.

St. Martin’s University is also not opposed to Centralia College offering this degree. They, too, saw the possibility of partnerships in endorsement areas as teachers are most marketable with multiple endorsements. One of their staff is a certifications officer and would be able to proctor or test students upon graduation in their certification process. Staff from St. Martin’s recommended we look into school psychology and speech pathology degrees. We did research and the American Speech and Hearing Association is the only organization that offers these trainings.

University of Washington did not feel Centralia College’s offering would be in conflict or competition with the degrees offered at UW. They endorsed Centralia College’s obtaining of the BAS-TE.

Heritage University states “The need is there that four-years can’t meet. This is an opportunity to increase professional development of staff in the field which is always beneficial.”

Although St. Martin’s University provide teacher education degrees on Centralia College’s campus, and City University offers program at Centralia and GHC, the cost of the programs are significantly higher than the cost of BAS tuition as outlined by the State Board of Community and Technical Colleges. Centralia and GHC can offer students a quality education at a reduced cost making college more financially accessible for students with limited financial means.
Lewis and Grays Harbor Counties currently and historically have the highest rates of unemployment in the state. The attainment of a BAS-TE degree will give paraprofessionals more opportunities for advancement in their school districts providing a higher wage and giving themselves and their families a higher standard of living. “Growing our own” takes advantage of the knowledge of staff who understand the local culture and can work effectively within it, increases retention of current staff and provides a better outcome for children with special needs.

Lewis County has some interesting differences from other areas of the state. It is a very wide county (126 miles east to west). Travel from Packwood to the nearest program in Olympia takes 2 ½ hours. Residents have a tendency to love where they live and not want to move, which is evidenced by statistics showing Lewis County residents have a slightly higher rate of home ownership (69.3 percent) and for living in one place for longer than one year (84 percent).

Grays Harbor County has distance related differences too. The demographics of GHC’s service area include a number of remote pockets of underrepresented students. Several of these areas are an hour or more from the college. Many of the students who live in these communities do not want to relocate due to a number of family responsibilities or concerns with the potential loss of cultural identity. It is these populations of place-bound students, “which constituted overwhelmingly of women with heavy family and work obligations and limited resources” who feel the greatest effect of the financial cost of commuting as well as the affordability of time.

City University and St. Martins University have programs co-located on the Centralia College campus. We have discussed opportunities to collaborate with these programs such as offering endorsement courses. The cost of tuition at City University and St. Martins University is significantly higher than the BAS tuition costs. High tuition rates pose a barrier to many perspective students due to the low median wage in Lewis County. Other programs require students to travel to either Olympia or Longview and due to the rural nature of Lewis County, the distance, time, and cost of gasoline can be prohibitive for many students.

South Puget Sound, Centralia and Grays Harbor Colleges have a long history of cooperation and sharing programs and as members of the Pacific Mountain Workforce Development Council have shared many projects through that entity. In a letter dated, January 15, 2015, the Director of Early Childhood Education and the Interim Dean of Social Sciences and Business have signed a letter of support that states “South Puget Sound Community College agrees to refer students in varying programs, including, but not limited to Early Childhood Education, Education, and Paraprofessional, to a four-year program in Teacher Education at Centralia College.”
The Centralia-Chehalis Student Support Program is already located on the Centralia College campus. Classes are provided for birth-three early intervention programs as well as the Visions high school completion programs. Students enrolled in Centralia College Early Childhood Education practicum classes utilize the program for practicum experiences.

Centralia College has strong support for this program from the Lewis County Autism Coalition, Popes Kid’s Place, Basics NW, Lewis County Parent-to-Parent, local birth-to-three early intervention programs known as In-Tot and Growing Together, as well as the Lewis County Developmental Disabilities Advisory Board.

The BAS-TE program will require students to participate in practicum classes, which include interning in local schools. Centralia and Grays Harbor Colleges already have placement areas in place to support the interning needs, as part of the ECE programs. Centralia-Chehalis Special Education Coop is located on the Centralia College campus and current Education Program students are placed in their program to gain hands-on experience and knowledge.

Classes may occur primarily in the evenings on weekends and in the summer when college facilities are least used and working professionals are able to attend. A combination of hybrid, ITV, and possibly online classes will be utilized to reduce the burden placed on the more rural student caused by attending daily classes in person. Surveys indicate that the majority of students have access to the internet, however computer labs are available on main campus as well as the East County Center at Morton. Most local libraries are part of the Timberland Regional Library system and students can access computers at those sites as well.

The Joint BAS-TE program would be unique by offering a BA-level program that is typically offered in more populated areas. Areas such as the Spokane region have a lower level of unfilled Special Education teacher positions, possibly because there are three programs within the region (Educator Supply and Demand in Washington State, 2006).

Lower costs of delivering a local BAS-TE program through Centralia College and Grays Harbor resulting in lower tuition rates would be more attractive to rural and lower-income populations.

**Conclusion**

Centralia and Grays Harbor Colleges are rural institutions with unique area needs. With the high unemployment rates and the low median hourly rates in the county, it is important for the colleges to provide programs that allow students who are working to continue working while pursuing degrees that will increase their standard of living. The joint BAS-TE offers students a robust, stable, and affordable option to complete their studies.
Although the area is rural and the school districts are relatively small, there is still a need to educate all students.

- Local school districts hired thirteen special education teachers for the 2014-2015 school year
- Fifty-five percent of special education teachers in Lewis County are between the ages of 45-64
- Special education teachers exit the profession at higher rates, 12.3 percent than any other assignment field
- The number of K-12 students with special education needs is increasing
- Classes will be available for students seeking initial certification and certified instructors who need clock hours and/or a special education endorsement
- A pathway for current paraprofessionals who can utilize prior learning to earn credits toward their AAS-T Paraprofessional degree and enter BAS-TE quicker
- A pathway for a variety of degrees
  - Associate in Arts/Associate in Applied Science – Transfer Degree in Early Childhood Education for Teacher Certification
  - Associate in Applied Science in Early Childhood Education
  - Associate in Applied Science – Transfer Degree in Early Childhood Education
  - Early Childhood Education Certificate State Credential
  - Early Childhood Education Initial Certificate
  - Early Childhood Education Short Certificate
  - Associate in Applied Science – Transfer Degree in Educational Paraprofessional: Special Education Emphasis
  - Associate in Arts - Education

The BAS-TE is a great example of the identification of an emerging need and an opportunity to build upon well-established strengths at Centralia and Grays Harbor Colleges.
References


http://data.pesb.wa.gov/production/district/beginning

WOIS. Retrieved http://www.wois.org/use/occs/viewer.cfm?occnum=1455#eo
Appendix A:

BAS-TE: Special Education, online survey of current students

An online survey was provided to current Centralia College students. The survey asked current students the following questions:

1) I think this degree would help me earn a higher income
   a. Strongly agree
   b. Agree
   c. Neither agree nor disagree
   d. Disagree
   e. Strongly disagree

2) I am personally interested in getting into a teaching position that requires a bachelor’s degree
   a. Strongly agree
   b. Agree
   c. Neither agree nor disagree
   d. Disagree
   e. Strongly disagree

3) If Centralia College offers this degree, I am likely to enroll in the program within the next two to five years.
   a. Strongly agree
   b. Agree
   c. Neither agree nor disagree
   d. Disagree
   e. Strongly disagree

4) I have access to high speed internet
   a. Strongly agree
   b. Agree
   c. Neither agree nor disagree
   d. Disagree
   e. Strongly disagree

5) I have the capability to watch Internet videos
   a. Strongly agree
   b. Agree
   c. Neither agree nor disagree
   d. Disagree
   e. Strongly disagree

6) I have a place to watch Internet videos (such as library, coffee shop, restaurant, schools, etc)
   a. Strongly agree
b. Agree
c. Neither agree nor disagree
d. Disagree
e. Strongly disagree

7) Please rank the schedules when this program would work for you. Rank your most preferred schedule with a 1, and your least preferred with a 5. The following days/times/formats would work best for me:
   a. Weekend intensives (8-hour sessions on Saturday and Sunday)
   b. Summer intensives (8-hour sessions on each day for one week)
   c. Day classes (one face-to-face class per week and the rest online)
   d. Night classes (one face-to-face class per week and the rest online)
   e. Saturdays (one face-to-face class per week and the rest online)

8) If the program were to be offered in an evening hybrid format (one night per week and the rest online), which night works best for you? Please rank your most preferred night with a 1, and your least preferred with a 4.
   a. Monday
   b. Tuesday
   c. Wednesday
   d. Thursday

9) I would need access to child care for children ages 0-12, if I were to enroll in this program (check all that apply).
   a. Not at all
   b. Day
   c. Evening
   d. Weekend
   e. Summer
Appendix A:

BAS-TE: Special Education, paper survey of current paraeducators

Local districts were provided a paper survey to hand out to current paraeducators. The survey asked current students the following questions:

1) I think this degree would help me earn a higher income
   a. Strongly agree
   b. Agree
   c. Neither agree nor disagree
   d. Disagree
   e. Strongly disagree

2) I am personally interested in getting into a teaching position that requires a bachelor's degree
   a. Strongly agree
   b. Agree
   c. Neither agree nor disagree
   d. Disagree
   e. Strongly disagree

3) If Centralia College offers this degree, I am likely to enroll in the program within the next two to five years.
   a. Strongly agree
   b. Agree
   c. Neither agree nor disagree
   d. Disagree
   e. Strongly disagree

4) I have access to high speed internet
   a. Strongly agree
   b. Agree
   c. Neither agree nor disagree
   d. Disagree
   e. Strongly disagree

5) I have the capability to watch Internet videos
   a. Strongly agree
   b. Agree
   c. Neither agree nor disagree
   d. Disagree
   e. Strongly disagree

6) I have a place to watch Internet videos (such as library, coffee shop, restaurant, schools, etc)
   a. Strongly agree
b. Agree
c. Neither agree nor disagree
d. Disagree
e. Strongly disagree

7) Please rank the schedules when this program would work for you. Rank your most preferred schedule with a 1, and your least preferred with a 5. The following days/times/formats would work best for me:
   a. Weekend intensives (8-hour sessions on Saturday and Sunday)
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   c. Day classes (one face-to-face class per week and the rest online)
   d. Night classes (one face-to-face class per week and the rest online)
   e. Saturdays (one face-to-face class per week and the rest online)

8) If the program were to be offered in an evening hybrid format (one night per week and the rest online), which night works best for you? Please rank your most preferred night with a 1, and your least preferred with a 4.
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9) I would need access to child care for children ages 0-12, if I were to enroll in this program (check all that apply).
   a. Not at all
   b. Day
   c. Evening
   d. Weekend
   e. Summer
BACHELOR OF APPLIED SCIENCE in IT: APPLICATION DEVELOPMENT

Submitted 27 February 2015

By

Centralia College

600 Centralia College Blvd.
Centralia WA 98531

CENTRALIA COLLEGE
COVER SHEET
STATEMENT OF NEED

Program Information
Institution Name: Centralia College

Degree Name: BAS-IT: Application Development  CIP Code: 

Name(s) of existing technical associate degree(s) that will serve as the foundation for this program:

Degree: AAS Computer Science  CIP Code:  Year Began: 

Degree: AS Computer Science  CIP Code:  Year Began: 

Degree:  CIP Code:  Year Began: 

Proposed Start Implementation Date (i.e. Fall 2014): Fall 2016

Projected Enrollment (FTE) in Year One:  20  at Full Enrollment by Year: 2018

Funding Source:  State FTE:  ☐  Self-Support:  ☑  Other:  ☐

Mode of Delivery
Single Campus Delivery: Centralia College main campus face-to-face/hybrid courses

Off-site:

Distance Learning:

Statement of Need: Employer Demand  Student Demand  Options for place-bound students

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John Martens  Vice President, Instruction  3/10/2015  Date

Centralia College  BAS in Application Development  Page 2
**Introduction**

Centralia College seeks approval to offer a Bachelor of Applied Science Degree in IT: Application Development (BAS-ITAD) beginning in the fall of 2016. The proposed BAS-ITAD will help address employer demand for software developers and computer programmers nationally, in the state of Washington, and within the PAC Mountain service district. In particular, this degree will help meet the growing demand for employees with advanced skills in programming languages. In addition to the specific technical skills the general education curriculum that is contained in the program will prepare graduates for the current labor market by developing skills such as effective communication, the use of logical analysis in problem-solving, identifying challenges and overcoming setbacks. Graduates will be prepared to engage in positive working relations, be a highly functioning team member, and keep projects on track.

Centralia College offers two options for students interested in the computer programming field: a two-year AAS degree, and a two-year AS degree. These options provide students with the latest industry programming skills. However, for high-wage and high-demand occupations industry employers are seeking and prefer graduates with baccalaureate degrees.

If approved, this degree would increase opportunities for place-bound students, many of whom are working adults in our area. Place-bound working adults will benefit from having a baccalaureate program that provides quality education without having a long commute, the need to relocate, or decrease income by having to limit their current work hours. Local employers will benefit from having a local, skilled workforce to fill open positions. Applied baccalaureate degree programs support Centralia College’s mission to improve people’s lives through lifelong learning. Increasing service, to our district, through baccalaureate offerings is a strategic initiative of our board of trustees and president.

Companies in Centralia College’s service district and across Washington state rely on Information Technology positions, including application developers. According to the Bureau of Labor Statistics, “The main reason for the rapid growth is a large increase in the demand for computer software. Mobile technology requires new application. The healthcare industry is greatly increasing its use of computer systems and applications. Also, concerns over threats to computer networks and electronic infrastructure.” (bls.gov) The top employment industries in Lewis County include: health services, government, retail, education, manufacturing and distribution. Each industries relies on the use of technology to fulfill their missions.

The BAS-ITAD is designed to provide a rigorous educational experience that fulfills the program’s mission:

To graduate individuals who have a strong technical foundation in application and software development and will be prepared to work in teams, manage IT projects, and prepare software documentation.

**BAS-ITAD program outcomes include:**

- Demonstrated ability to develop efficient code following best practices in data design and software development.
- Communicate effectively with stakeholders
- Demonstrated ability to troubleshoot and problem-solve defects from identification to resolution
Write and present technical documentation
Demonstrate project management skills, such as estimating work effort, assessing risk, analyzing data, defining project scope
Perform software quality assurance activities

The proposed BAS-ITAD degree program provides:

- An educational pathway for current AAS Computer Science Technology graduates to further develop programming language, logical analysis, problem-solving, and communication skills.
- An affordable BAS option to overcome the cost barrier to higher education faced by many residents in our area.
- An opportunity for career advancement that provides a wage substantially higher than the area average, creating a positive economic impact to the area and improving the lives of our residents.
- An opportunity for students to obtain a new skill set, change career tracks, and enter a high-wage, high-demand career.

In addition to addressing industry demand, the BAS-ITAD degree aims to help achieve the priorities articulated by the Washington State Board for Community and Technical Colleges (SBCTC). Specifically, this degree supports goals one and four:

- Serve more people, including groups who have been underserved in the past
- Contribute more to the production of baccalaureate degrees

**Statement of Need – Criteria #1**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship to institutional role, mission, and program priorities</td>
<td>Describe how the proposed program reflects and supports the role and mission of the institution, and reflects program priorities.</td>
</tr>
</tbody>
</table>

RCW 28B.50.20 establishes the purpose of the community and technical college systems. In its interpretation of its role under 28B.50.20, Centralia College has adopted a broad mission statement and three core themes that further define this mission.

**Mission Statement**
Improving peoples’ lives through lifelong learning

**Core Theme 1: Access, Diversity, Persistence**
Centralia College shall make the benefits of higher education accessible by enrolling a wide range of students including people who have been traditionally underserved, by progressing and graduating a significant number of students, and by making its educational offerings as affordable as possible.

**Core Theme 2: Educational Programs**
Centralia College shall provide to our greater community an ever-increasing number of educated people having the knowledge and skills to become lifelong learners and productive and responsible citizens, more capable of realizing their highest human potential.
Theme 3: Stewardship
Centralla College shall serve as a model of effective stewardship to the citizens of Washington State by prudently managing resources, providing training and qualified college employees, and by continuously implementing sustainability best practices.

Each of the Core Themes has a set of measureable outcomes that have been adopted by the board of trustees. The board of trustees adopted core theme 2.8 on August 14, 2014.

Core Theme Objective 2.8: Baccalaureate Degrees
Centralla College shall increase access to the benefits of higher education by offering applied baccalaureate degrees that are responsive to need and accessible to students completing technical associate degrees. Program success will be based on post-graduation student employment, salary, and advancement.

Centralla College is the nexus of higher education in District 12, Lewis and south Thurston Counties, brokering and offering opportunities for higher education to the citizens of our essentially rural service district. It is the mission of the college to provide accessible, high-quality educational programs that lead to intellectual growth and meaningful employment. A local Bachelor of Applied Science in Application Development (BAS-ITAD) degree offered at BAS tuition rates fills a gap in our educational offerings and meets the affordability requirement for those seeking to attain a bachelor's degree.

Centralla College’s vision is “to be an economic driver in our local economy.” Lewis County currently and historically has one of the highest unemployment rates in the state. According to the Employment Security Department for Washington State, the November 2014 unemployment rate for Lewis County is 10.3 percent compared to the state average of 6.2 percent. All counties, except Thurston County, that neighbor Lewis County also report unemployment rates significantly higher than the state average.

Wages and income for Lewis County also lag state and national averages. The county’s annual average wage in 2013 was $35,670 with the manufacturing industry paying the highest wages at $49,246, followed by mining at $48,958. The median hourly wage in the county in the county was $17.98, which placed the county below the statewide average of $21.64. Over the period 2009-2013, 15.4 percent of the county’s population was living below the poverty level compared with 13.4 percent for the state. The economic barriers of the area further indicate the need for high levels of education to support better paying job opportunities. (Employment Security Department, U.S. Census Bureau)

Historically, Lewis County has relied on natural resource extraction industries to provide living wage jobs. With the decline in the timber industry throughout the past 30+ years and the compounding loss of mining opportunities with the closing of the TransAlta coal mine in 2006, the relative average wage in Lewis County has also declined. Personal income, in Lewis County, lagged both the state and nation. Lewis County’s per capita
personal income in 2012 was $32,056 compared to the U.S. average of $43,735 and the state rate of $46,045.

The residence of Lewis County have limited income and the cost of college is a barrier for students with such limited financial resources. Centralia College can offer students a quality education at a reduced cost making college more financially accessible.

The purpose of the BAS-ITAD degree is to prepare students to become entry-level application developer; a polyglot with a full stack of languages, practices and business intelligence skills.

A local BAS-ITAD degree would fill the gap in Centralia College’s educational offerings while meeting the need of keeping an undergraduate degree affordable and attainable for those living in a rural area.

Program Priorities
The BAS-ITAD is designed to provide a rigorous educational experience that fulfills the program’s mission:

To graduate individuals who have a strong technical foundation in application and software development and will be prepared to work in teams, manage IT projects, and prepare software documentation.

According to WOIS/The Career Information System application developers need to possess the skills and ability to effectively communicate, reason and problem solve, use math and science, manage oneself, people, time and things, work with people, work on things (programs, equipment), and perceive and visualize.

The skills and abilities stated by WOIS will be an integral driver for the curriculum of the BAS-ITAD degree.

Specific BAS-ITAD outcomes include:
- Demonstrated ability to develop efficient code following best practices in data design and software development.
- Communicate effectively with stakeholders
- Demonstrated ability to troubleshoot and problem-solve defects from identification to resolution
- Write and present technical documentation
- Demonstrate project management skills, such as estimating work effort, assessing risk, analyzing data, defining project scope
- Perform software quality assurance activities

The Centralia College BAS-ITAD reflects and supports the role and mission of Centralia College and its attainment has been designated a priority by the college’s president and board of trustees for the coming year. The BAS-ITAD at Centralia College will provide students with the training they need to be application developers or computer programs.
In summary, the proposed BAS-ITAD program is well aligned with the college’s mission and priorities. It provides the opportunity to improve the graduates’ economic prospects and is a step in the progression of life-long learning. It is aligned with the college’s vision of being an economic driver in the economy. And, it helps the college meet Core Theme Objective 2.8.

<table>
<thead>
<tr>
<th>Criteria 2</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support of the statewide strategic plans.</td>
<td>Describe how the program will support SBCTC Mission goals outlined in the Mission Study and WSAC policies and goals for higher education as articulated in the Strategic Master Plan for Higher Education.</td>
</tr>
</tbody>
</table>

**BAS-ITAD Aligns with SBCTC Mission Goals**

The SBCTC Mission Study developed a Twenty-Year Action Plan that address needs relating to economic demand, student success, and innovation. Three specific goals identified in the action plan are directly supported by the BAS-ITAD degree: (1) Serve more people, including groups who have been underserved in the past, (4) Contribute more to the production of baccalaureate degrees.

In addition, the 2008 Strategic Master Plan for Higher Education in Washington states two goals that the BAS-ITAD addresses. Goal 1: “We will create a high-quality higher education system that provides expanded opportunity for more Washingtonians to complete postsecondary degrees, certificates, and apprenticeships.” Goal 2: “We will create a higher education system that drives greater economic prosperity, innovation and opportunity.”

**BAS-ITAD Addresses WASAC Policies and Goals**

This program addresses Step I of the WSAC Strategic Master Plan Update 2012 which is to “Increase capacity of higher education to serve more students.” The Mission Study identifies strategies to increase adults with a baccalaureate level of education as a way to strengthen the economy and provide for the needs of the workforce to have highly educated “locally grown” workers. For students who have earned AAS degrees, the proposed BAS-ITAD will offer affordable opportunities for further educational attainment and advanced skill development. The BAS-ITAD degree increasing educational pathways for professional technical degree graduates who have been limited in their ability to apply credits from these “terminal” degrees toward a bachelor’s degree at a four-year college or university.

**BAS-ITAD Will Help Fulfill Statewide Needs**

Employment Security Department’s Top 25 occupations for Washington State report dated November 2014, ranks positions for software developers/applications as the second behind registered nurses. Based on the data, new job postings and jobs reposted from the previous month were 6,189 with 2,052 new job postings that did not appear in the previous month. (Employment Security Department/LMPA; The Conference Board, Help Wanted Online job announcements).
Employer/Community demand for graduates with baccalaureate level of education proposed in the program.

Centralia College’s BAS-ITAD will serve a critical educational need in a county suffering the second-worst jobless rate in the state. There is a reason for optimism as new businesses move to Lewis County and occupations in this industry are projected to be in demand. However, the lack of highly educated workforce in the county results in the inability to meet current and projected employer needs. This program will fuel economic recovery in a county that has struggled with its shift from an agricultural, timber, and mining-based economy to a service-based economy.

The current lack of higher education attainment in Lewis County impacts both employers and the vitality of the community and quality of life for its residents. Because there are not enough educated workers to fill current and projected demands in computer science fields the county is not positioned to gain full return on its economic growth potential nor are the citizens of the county able to take advantage of these positions. The BAS-ITAD will improve the lives of Lewis County residents. Only 14.9% of the Lewis County population over 25 years old hold a bachelor’s degree, well below the statewide level. In Washington State, 31.6% of people over 24 years old hold at least a bachelor’s degree. Lewis County is in need of a local option for a bachelor’s degree.

Lewis Economic Development Council (LEDC) is a one-stop resource for business owners. They work tirelessly to attract new businesses to Lewis County. The LEDC has identified five key industries in Lewis County. One of those industries is IT/Telecommunications. The LEDC website states “There are options for connectivity in Lewis County. Lewis County is ideal for technology startups.” We have a number of computer and technology based companies that have found Lewis County to be a location where they can operate effectively. The businesses include Century Link, Comcast, Toledo Tel, AT&T, Rainier Connect and Verizon.

According to LEDC, the top private employers in Lewis County are; Providence Hospital, Fred Meyer Distribution Center, Hampton Affiliates, TransAlta and Cardinal Glass Corporation. Combined, these employers employ 2,115 employees and each depends heavily on information technology to achieve their business goals. In addition to private employers there are several government and education employers that require high-skilled information technology workers.
Based on A Skilled and Educated Workforce report updated 2013, “As in previous reports since 2006, this year’s analysis shows substantial gaps at the baccalaureate and graduate levels in the fields of computer science and engineering.” The table below was provided in the report and clearly demonstrates a gap between current completions in computer science and the total annual completions needed. If approved, the BAS-ITN would help to fill the supply gap. The report further states, “The largest gaps at the baccalaureate and graduate levels, as a percentage of supply, occur in the fields of computer science and engineering. The disparity in these fields is true whether one compares the supply of educated workers with demand at the entry educational level or at the competitive level. In computer science, the supply gap at the competitive education level exceeds the current rate of degree production by 146%.” The analysis of the report shows the need for an additional 1,840 baccalaureate graduates in computer science.

<table>
<thead>
<tr>
<th>High Employer Demand Fields at Baccalaureate Level and Above</th>
<th>Current Completions</th>
<th>Total Annual Completions Needed 2016-21</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Entry Education Level</td>
<td>Competitive Education Level</td>
</tr>
<tr>
<td>Computer Science</td>
<td>1,888</td>
<td>4,042</td>
</tr>
<tr>
<td>Engineering</td>
<td>1,432</td>
<td>2,467</td>
</tr>
<tr>
<td>Research, Science, Technical</td>
<td>1,377</td>
<td>1,376</td>
</tr>
<tr>
<td>Health Professions (Graduate/Professional Level)</td>
<td>1,569</td>
<td>1,750</td>
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</table>

Centralia College surveyed 20 agencies in Lewis, Thurston and Grays Harbor Counties. Eleven agencies responded to the survey with the following results. The survey questions can be located in appendix A.

Combined, the eleven agencies currently support 43 application developer positions with the anticipation of more than doubling current employment by adding another 94 positions. In addition, 100% of the organizations agreed that a bachelor’s degree would
be valuable in addition IT certifications. 82% of the businesses support Centralia College’s efforts obtaining a bachelor’s degree in IT.

The IT manager at one of our largest municipalities had these short words to say about local job demand for IT skills. “Definitely in demand as folks with skills aren’t easy to find locally.”

Local employers included the following statements in their survey responses: The Washington State Patrol stated “State government as a whole is recruiting to fill 90 vacant positions in Thurston, Lewis, and Grays Harbor counties as of mid-March 2015. A large percentage of these positions involve application development.”

Pacific Mobile Structures stated application developers “I see this field emerging as more companies look for customized an in house solutions.

Lewis County government indicates a “significant increase” in the need for application developers.

Based on current job postings, application developers are needed in private and public sector positions up and down the I-5 corridor. According to indeed.com there are 107 application developer jobs within 50 miles of Lewis County. Many of which are located in Tumwater and Olympia, a short 20 minute commute from Centralia/Chehalis.

The diversity of industries and companies within the region, demand and require the skillset that will be provided through this baccalaureate degree. This degree will provide a strong foundation for any graduate to enter the job market with the skills needed to perform within the various industries. Current employees, working within any company could potentially increase the career advancement opportunities by increasing their educational achievement.

Regional demand for qualified works who have a bachelor’s degree in software development and computer programming is higher than average and projected to increase much faster than average. Application developers are needed not only in tech companies but are also needed in industries with large IT departments such as city, county, and state government agencies.

<table>
<thead>
<tr>
<th>Based on data from the National Bureau of Labor Statistics, Software Developers:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Median Pay (May 2012)</strong></td>
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<tr>
<td><strong>Entry-level education</strong></td>
</tr>
<tr>
<td><strong>Number of Jobs, 2012</strong></td>
</tr>
<tr>
<td><strong>Job Outlook, 2012-2022</strong></td>
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<tr>
<td><strong>Employment Change, 2012-2022</strong></td>
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</tbody>
</table>

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<tr>
<th>Based on data from the National Bureau of Labor Statistics, Computer Programmers:</th>
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<tbody>
<tr>
<td><strong>Median Pay (May 2012)</strong></td>
</tr>
<tr>
<td>Criteria 4</td>
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<tr>
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<tr>
<td>Applied baccalaureate program builds from existing professional and technical degree program offered by the institution.</td>
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</table>

**Applied baccalaureate program builds from existing professional and technical degree program offered by the institution.**

The Centralia College Computer Science Program has been in existence for more than 20 years.

Centralia College’s current computer science programs will provide a seamless, transfer into the BAS-ITAD program allowing a variety of existing program graduates to transfer directly into the BAS program.

Below are the completion rates from 2009-2014 of programs offered through Centralia College, that would provide workforce pathways to the BAS-ITAD. The closest BAS-ITAD program is offered in South Seattle which is an infeasible commute for students from...
Centralia College completions:

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</thead>
<tbody>
<tr>
<td>AAS Computer Science Technology</td>
<td>4</td>
<td>7</td>
<td>9</td>
<td>12</td>
<td>14</td>
<td>61</td>
</tr>
<tr>
<td>AS-T Track 2 Computer Science**</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

Centralia College’s AAS – Computer Science Technology (AAS-CST) has been greatly redesigned and continues to evolve.

Prior to the 2014-15 academic year the AAS-CST degree program was a mixture of electronics, robotics, programming languages, desktop, server and network technologies. While the program had steady high enrollment, students had difficulties completing a degree with such a wide range of core subject matter.

For the 2014-15 academic year the AAS-CST degree program was completely separated from the electronics and robotics curriculum. The degree program was split up into two degree concentrations.

- Desktop and Network Systems Concentration focuses on mobile device, desktop and server software, desktop and server hardware as well as network technologies.

- Programming and Web Development Concentration focuses on utilizing at least three programming languages for software development as well as web and mobile OS development.

Both concentrations share the same first year fall and winter quarter courses. Introduction to Programming, Desktop Operating Systems 1, Web Scripting 1 and Network Technology 1. These shared courses allow all the AAS-CST students to better understand the career paths and choose the concentration most suited to them. Additionally both concentrations include internship requirements that allow our students to job shadow IT Specialists in a real world environment or be part of a development team creating software solutions for current real world needs.

Our AAS-CST degree program is expected to continue to evolve. For the 2015-2016 academic year and beyond we are recommending that the degree program name be changed to AAS – Information Technology to better reflect industry position names and verbiage. It is the desire of the Computer Science department to evolve the curriculum to ensure our students receive industry certifications. To that end, the Computer Science Director has applied for and received acceptance into the CompTIA Authorized Academy program. The AAS-IT concentrations will continuously be evaluated to ensure that the materials being taught are in line with current and future industry needs.
Centralia College also offers an AS emphasis Computer Science which would be a feeder into the BAS-ITAD program. The college tracks graduation rates of AS degrees but does not break that number into emphasis areas.

<table>
<thead>
<tr>
<th>Criteria 5</th>
<th>Standard</th>
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</thead>
<tbody>
<tr>
<td>Student demand for</td>
<td>Evidence of student interest and demand from multiple sources, such as</td>
</tr>
<tr>
<td>program within the</td>
<td>but not limited to: Students graduating with technical associate degrees</td>
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<tr>
<td>region.</td>
<td>in the region, survey of students within region, demand in excess of</td>
</tr>
<tr>
<td></td>
<td>opportunity to enroll in related traditional bachelor’s programs, and</td>
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<td></td>
<td>changes in industry standards.</td>
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<tr>
<td></td>
<td>Provide enrollment projections for each year over the next five years.</td>
</tr>
</tbody>
</table>

Student demand for program within the region.

Winter quarter of 2015 current Computer Science students were surveyed to determine local student demand for a BAS-ITAD degree program.

60 students responded to the survey giving the following results:

“Have you chosen one of the Associates in Applied Science – Computer Science concentrations?” 87% (52) of the respondents have chosen a concentration.

67% (35) of the respondents who have chosen a concentration chose the AAS-Computer Science – Programming and Web Development concentration.

“Centralia College is pursuing a Bachelors of Applied Science degrees in Application Development and Network Security. If those degrees were available, would you be interested in completing a Bachelor’s degree at Centralia College?” 90% (54) of the respondents indicated that they would like to pursue a Bachelor’s degree. Of that 90%, 65% (35) indicated that they would like to pursue a degree in Application Development.

Centralia College students, in general, are low-income students who do not have the resources to commute to another college. Due to the rural nature of our service district as well as the lack of disposable income, reliable high-speed Internet, at home is not available making online courses unfeasible. The BAS: IT-AD program allows low-income students to pursue a bachelor’s degree at a reasonable tuition rate, without a significant commute. The face-to-face delivery method that will used in the program provides students the access to both instructors as well as needed equipment and Internet.

Projected Enrollments for BAS-AD by Annualized FTE

| Centralia College | BAS in Application Development | Page 13 |
|----------------|------|------|------|------|------|------|
| 2016-2017      | 20   | -    | -    | -    | -    | -    |
| 2nd year       | -    | 19   | -    | -    | -    | -    |
| 2017-2018      | -    | 26   | -    | -    | -    | -    |
| 2nd year       | -    | -    | 21   | -    | -    | -    |
| 2018-2019      | -    | -    | 30   | -    | -    | -    |
| 2nd year       | -    | -    | -    | 24   | -    | -    |
| 2019-2020      | -    | -    | 30   | -    | -    | -    |
| 2nd year       | -    | -    | -    | 24   | -    | -    |
| 2018-2019      | -    | -    | -    | -    | 30   | -    |
| 2nd year       | -    | -    | -    | -    | -    | 24   |
| 2019-2020      | -    | -    | -    | -    | -    | 30   |
| Total FTE      | 20   | 45   | 51   | 54   | 54   | 54   |

**Criteria 6**
Efforts to maximize state resources to serve place-bound students.

**Standard**
Describe how the program will serve place-bound working adults.
Identify similar programs offered by public or independent institutions in the region.
Describe options that have been explored for collaboration with other public baccalaureate institutions, businesses, and/or community organizations considered in the development of the proposal. Describe unique aspects of the proposed program that differentiate it from similar programs and/or describe why expansion of an existing program would be desirable or necessary.

**Serving Place-bound Students**
Significant investments have been made for computer science programs. Fourteen colleges in Washington state have invested in and operate associate degree programs in computer programming. The proposed BAS-ITAD leverages that investment and provides an in-state pathway for those who wish to progress to higher levels of programming and development application employment.

Students who wish to complete an affordable 4-year degree in information technology have three options. 1) Leave the area to complete a degree. 2) Commute 1-3 hours each way to
attend a college outside the area. 3) Pay private college tuition rates. 4) Complete an online degree.

Affordability – The cost of college is a barrier for students with limited financial resources. The students attending Centralia College are among the lowest income students in the state. Recently released student income data from SBCTC breaks community college student income levels in to five levels from high to low. Centralia College has the largest number of students in the two lowest quintiles in the state at 81%.

Affordability is not just in fiscal costs involved in college, it relates to time as well. Low-income students are affected by the affordability of time. Adding commute time of one to three hours to travel to a 4-year institution in Olympia, Tacoma, or Seattle, simply costs too much time. The lost time has expenses in lost wages as well as higher costs of childcare. In considering educational options, students must consider more than tuition, as they have a number of additional costs.

Accessibility – The ability to access high-speed internet to successfully participate in online programs. Our service district is rural and there are many areas that do not have high-speed internet available. In addition, the cost of Internet is not feasible for many low-income families which makes online programs inaccessible. Our BAS-IT:AD program will promote face-to-face learning that provides students not only access to an instructor but access to necessary equipment to be successful in their studies.
This degree will provided students and place-bound working adults with the opportunity to earn a bachelor’s degree at a reasonable cost and without the need for expensive relocation. This degree is designed for place-bound students who for a variety of reasons; work, low financial resources, family obligations, desire to remain in their local community, etc. are not able to relocate to further their education. Classes will be offered at the main Centralia College campus which has the capability of offering ITV classes to the college’s extension campus in Morton to allow students in our most rural areas to lessen their commute.

The coursework will provide students the needed skills, and certifications to grow or advance in their current position and/or be competitive for a new position with a new employer.

Similar Programs in the Region
There are no similar programs in the local area. Other programs in Washington are a significant commute and cost for our residents. This commute and cost is not feasible for the low-income residents of Lewis County and would create a barrier to expanded educational opportunities.

Green River Community College offers a BAS in application development degree. The BAS Associate Dean spoke with Alan Carter, Information Technology Faculty at Green River Community College. During this discussion, Professor Carter shared that “the demand is so high in the area that a program at Centralia College, even a program next door, would not be a threat to our program.” Professor Carter agreed to provide an external review of Centralia College’s curriculum proposal. Professor Carter extended an offer to assist Centralia with any assistance and guidance in the development of and implementation of the BAS-ITAD degree.

The BAS-ITAD will provide a viable option for students in our service district as well as neighboring service districts that want this level of education and know that they will be
expected to have this level of education to reach most entry-level programming and
development positions.

In addition, this degree responds to the state-wide strategic plan to produce more
baccalaureate degrees and will contribute to an increased educational level of the residents of
Lewis County.

Conclusion

Centralia College’s service area continues to experience a low-wages and a low rate of
baccalaureate degree obtainment which would prepare students for higher-wage jobs. The
Bachelor of Applied Science in IT: Application Development will help bridge the gap between
the people of Lewis County and high-wage careers.

This proposed degree would be Centralia College’s third, and it would be the only degree of its
kind offered without students having an unreasonable commute or the expense of relocation.
As demonstrated in the student and employer surveys, there is demand and interest within our
service district for this degree. This degree does not duplicate a degree that is readily accessible
to our students. This degree will provide students the opportunity to obtain a bachelor’s
degree, at a reasonable cost, while working and living in their current community. This degree
will increase access for low-income students and provide a pathway from a current technical
degree to allow students interested in applications development a competitive opportunity in
the workplace.

The availability of this degree at Centralia College will increase access to baccalaureate degrees
in our service district. Working adults and current technical students will have an opportunity to
obtain a bachelor’s degree locally and employers will have access to a highly-skilled workforce
greatly impacting the economy of Lewis County.
References


Appendix A

An electronic survey was provided to 20 local businesses. Below are the survey questions.

Centralia College is pursuing the approval to offer bachelor’s degrees in Application Development and Networking. Please assist us in determining local demand for individuals in these career areas.

1. Does your organization currently employ an application developer? If so, how many?

2. Do you anticipate a need, within your organization, for an application developer? As an IT professional, what would be your impression regarding local job growth for Application developers?

3. What skill sets would you be looking for in an Application developer?

4. Would IT certifications be of more or less value than a bachelor’s degree?

5. Would having an employee who has completed a bachelor’s degree and has IT certifications be of value to your organization?

6. As an IT professional, in our local area, would you support Centralia College’s goal of offering these degree programs?

7. We are building internship requirements into our degree programs. Would your agency be willing to discuss internship opportunities?

8. Lastly, the Information Technology degree program is seeking local IT leaders to become members of the Information Technology advisory committee. This committee assists the college in better understanding the needs of the IT industry and tailor curriculum to meet those needs. The advisory committee normally meets twice a year in person or virtually. Would you be interested in becoming an advisory committee member?
COVER SHEET
STATEMENT OF NEED

Program Information

Institution Name: Clark College

Degree Name: **BAS in Applied Management**
CIP Code: 520201

Name(s) of existing technical associate degree(s) that will serve as the foundation for this program:

- AAS in Account, AAT
- Automotive Technology & AAS-T
- Early Childhood Education (See Appendix D for Additional two year degrees)

Degree: year degrees) CIP Code: ___ Year Began: ________

Degree: Associate of Applied Science CIP Code: ___ Year Began: ________

Proposed Start Implementation Date (i.e. Fall 2014): **Fall 2016**

Projected Enrollment (FTE) in Year One: 35 at Full Enrollment by Year: 70

Funding Source: State FTE: ☐ Self-Support: ☒ Other: ☐

Mode of Delivery

Single Campus Delivery: **Clark College main campus, face-to-face, and hybrid**

Off-site: 

Distance Learning: Canvas format/hybrid

Statement of Need: Please see criteria and standard sheet FORM B. Page Limit: 20 pages

Contact Information (Academic Department Representative)

Name: Dr. Tim Cook

Title: Vice President of Instruction
Applied Baccalaureate Degree Program

Statement of Need
# Applied Bachelor Degree

## Statement of Need Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Relationship to institutional role, mission, and program priorities.</td>
<td>Describe how the proposed program reflects and supports the role and mission of the institution, and reflects program priorities.</td>
</tr>
<tr>
<td>2. Support of the statewide strategic plans.</td>
<td>Describe how the program will support SBCTC Mission goals outlined in the Mission Study and WSAC policies and goals for higher education as articulated in the Strategic Master Plan for Higher Education.</td>
</tr>
<tr>
<td>3. Employer/community demand for graduates with baccalaureate level of education proposed in the program.</td>
<td>Employer demand must exceed regional supply of graduates with relevant degrees. Demand must be based on data sources including but not limited to local employer survey, traditional labor market data, industry data, trade association data, and other transactional data. Please provide evidence of the gap between the number of program graduates versus the number of job openings locally and regionally.</td>
</tr>
<tr>
<td>4. Applied baccalaureate program builds from existing professional and technical degree program offered by the institution.</td>
<td>Describe the existing professional and technical degree program that will be used as the foundation for the applied baccalaureate program. ▪ How long has the program been in existence? ▪ What has been the enrollment history of the program over the past five years?</td>
</tr>
<tr>
<td>5. Student demand for program within the region.</td>
<td>Evidence of student interest and demand from multiple sources, such as but not limited to: Students graduating with technical associate degrees in the region, survey of students within region, demand in excess of opportunity to enroll in related traditional bachelor’s programs, and changes in industry standards. Provide enrollment projections for each year over the next five years.</td>
</tr>
<tr>
<td>6. Efforts to maximize state resources to serve place-bound working adults.</td>
<td>Describe how the program will serve place-bound working adults.</td>
</tr>
</tbody>
</table>
| bound students. | Identify similar programs offered by public or independent institutions in the region.  
|                | Describe options that have been explored for collaboration with other public baccalaureate institutions, businesses, and/or community organizations considered in the development of the proposal.  
|                | Describe collaboration with similar CTC BAS programs and related CTC Centers of Excellence.  
|                | Describe unique aspects of the proposed program that differentiate it from similar programs and/or describe why expansion of an existing program would be desirable or necessary. |
The Bachelor of Applied Science in Applied Management Degree Program

Statement of Need

Application to the Washington State Board for Community and Technical Colleges

Submitted By
Clark College
Vancouver, Washington
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<td>10</td>
</tr>
<tr>
<td>2. Criteria: Support of the statewide strategic plans.</td>
<td>11</td>
</tr>
<tr>
<td>3. Criteria: Employer/Community demand for graduates with baccalaureate level of education proposed in the program.</td>
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</tr>
<tr>
<td>4. Criteria: Applied baccalaureate program builds from existing professional and technical degree programs offered by the institution.</td>
<td>19</td>
</tr>
<tr>
<td>5. Criteria: Student demand for program within the region.</td>
<td>21</td>
</tr>
<tr>
<td>6. Criteria: Efforts to maximize state resources to serve place-bound students.</td>
<td>23</td>
</tr>
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Appendix – Professional and Technical Degrees supported by BAS. 30
Introduction

Clark College is proactively developing a Bachelor of Science (BAS) in Applied Management degree to build on its two-year Career and Technical Education (CTE) degrees. This proposed junior and senior year offering provides its graduates, alumni, and other interested individuals with a new pathway in which to advance their educational and professional opportunities. This BAS in Applied Management differentiates itself from the conventional Bachelor of Arts, by offering graduates the relevant management skill most needed in the labor market. This Statement of Need (A &B) demonstrates the demand by the employers, the students, and the region for such a degree. Clark College is prepared to launch the BAS in Applied Management degree, with approval from the state and other required agencies.

Clark College is the second largest community college in Washington State and provides over 20 viable technical programs to serve three counties – Clark, Skamania, and western Klickitat. Accredited by the Northwest Commission on Colleges and Universities, Clark College annually serves over 19,000 students, to include over 9,500 credit FTEs. The Career and Technical programs are tailored to meet a growing demand in the present and growing industries. Most of Clark’s students work and live in the three regional counties served by the college. Additional job opportunities for our students include the rapidly expanding job markets in the greater Portland area and the vast virtual ecommerce and global environments located well beyond the immediate region. To serve students and stakeholders to meet current and future needs, Clark College takes great care to ensure its programs are up-to-date, flexible, and add the quality and value needed for sustainable economic growth.

The Bachelor of Applied Science in Applied Management degree was designed to support the Clark College Vision Statement for the 2009-2014 Strategic Plan. (The BAS in Applied Management likewise supports the proposed, updated Strategic Plan for 2015-2020.) This 90-credit, upper-division program will focus on the Vision Statement, by providing:

- *Extraordinary Education* – using the “Learning College” model, the BAS will refine and implement improvements in the curriculum, by continuing in the current, college-wide movement to review its course outcomes and assessments, program outcomes and assessments, teaching and learning methods, and faculty credentials, making changes to meet benchmarks as necessary. In addition to tracking the progress of the BAS in Applied Management program in terms of quality goals on a yearly basis, at the end of the third year a comprehensive program evaluation will be conducted.

- *Engaged Learners* – in addition to the use of current, effective technological methods and equipment and real world and theory-based course content, BAS majors will be part of an internship program to prepare students to obtain employment and to learn within diverse positions and industries.
• **Excellent Services** – specialized management program advisors, a writing/tutoring center, varied methods of course delivery, a technologically advanced library, and Career Services will be key parts of the college’s infrastructure that will support this new program.

• **Enriched Community** – Clark College will establish and maintain business and non-profit partnerships to support economic development, an active advisory committee, an all-encompassing Diversity Plan (2009), and outreach to local high schools, colleges, and universities for continued educational pathways. The program will strive to provide students with a sense of security: personally, professionally, and economically.

The Clark College BAS in Applied Management degree will provide highly-qualified graduates to fill the needs of a job market comprised of both entry-level operations managers to top executives¹. It is forecasted that there will be approximately 7,540 management jobs in Clark, Skamania, and Klickitat counties by 2020, an increase of 911 jobs or 14%. Expanding to include Multnomah, Washington, and Clackamas counties in Oregon shows a 10% growth rate anticipated from 2014 to 2020, up to a total of 68,945 management occupations. Demand for students graduating with the BAS in Applied Management targets occupations in a broad spectrum of industries, with titles such as human resource manager, construction manager, and administrative manager. Growth in top management fields, according to percentage change and with positive annual average increase in job openings, demonstrates the demand for a Bachelor of Applied Science in Management in career and technical fields in the southwest region of Washington and the Portland/Vancouver metropolitan area.

**Projected BAS in Applied Management**

**Program Outcomes**

Upon the successful completion of the Clark College Bachelor of Applied Science in Management degree, the student will be able to:

1. Describe the complexity of forces that affect trading in domestic and global markets in relationship to business survival and success.

2. Recognize and implement effective communication strategies, appropriate to organizational settings.

3. Analyze and apply managerial functions, roles, and styles to be used in various managerial/supervisory situations.

4. Analyze the dynamic internal and external factors that affect small to large organizations to create effective strategies for stability and/or change.

5. Recognize and explore the challenges of conscientiously managing diversity, ethics, and social responsibility.

6. Research information, data, and technologies to support effective decision making.

7. Analyze legal issues for risk management and responsible oversight.

8. Understand financial models for business decision-making, the development and analysis of capital and operating budgets, and funding options to support organizational needs.

9. Evaluate and develop organizational structures and operating procedures to foster continuous improvement, innovation, and quality results.

10. Balance theoretical and practical strategies and policies for a productive and motivated workforce.

11. Develop and apply a marketing strategy, based on an integrated marketing plan, to produce and distribute products at optimum operational levels.

12. Understand and create an electronics portfolio that has specific segment portions from each BAS in Management course that can be used to promote the outcomes achieved in the BAS in Management Program.

1. **Criteria: Relationship to Institutional Role, Mission, and Program Priorities**

Clark College’s Mission Statement underscores our commitment to being a learning-centered college:

Clark College Mission Statement

Clark College provides opportunities for diverse learners to achieve their educational and professional goals, thereby enriching the social, cultural, and economic environment of our region and the global community.

Clark College provides accessible, comprehensive education to all its students. The college focuses on career and technical education (38%), academic transfer (51%), pre-college and basic skills (8%), and personal development and cultural enrichment (3%). The BAS program will provide students from these varied, diverse areas with the opportunity to extend their studies beyond the associate degree.

In addition to the Vision Statement and Mission Statement, Clark College has established a comprehensive Strategic Plan with goals to provide the framework for planning and decision-making. The BAS in Applied Management, an integral and expanded part of the college’s common core themes, will:
- **Focus on Learning** – by focusing on innovative and quality education, services, and outcomes to assure student success;

- **Expand Access** – by providing varied modes of educational delivery, at different times, at different locations, in an affordable manner;

- **Foster a Diverse College Community** – by recruiting, retaining, supporting a diverse student population, and preparing graduates to work and interact effectively in a diverse world;

- **Respond to Workforce Needs** – by continuing to meet the economic needs of the local and global economy by providing continuing education and training to students to meet these needs;

- **Enhance College Systems** – by providing monetary assistance and maintaining an infrastructure to support upper-division studies.

With this degree, Clark College will strengthen its commitment to student success and excellence in teaching, empowering learners to enrich the social, cultural, and economic vitality of our region and the global community.

2. **Criteria: Support the Statewide Strategic Plans**

Clark College has aligned its Bachelor of Applied Science (BAS) in Management degree with the overarching goals of the Washington State Strategic Master Plan for Higher Education in support of the statewide goals. These are outlined in the State Board of Community and Technical Colleges’ (SBCTC) mission study and by the Washington Student Achievement Council (WSAC).

Clark College’s BAS in Applied Management is committed to:

**A. Serve more people, including groups who have been underserved in the past.**

Identified in the plans as an underserved area, the BAS in Applied Management brings much needed educational opportunities to Southwest Washington. The degree is geared towards workforce program completers having a higher concentration of underserved populations such as older students, entry-level wage earners, students of color, place-bound students, and a high percent of students entering college with math skills below the college level. These students are less likely to continue their education after two years when faced with the challenges of transitioning to a different campus or of essentially starting over because the majority of the occupational credits are not recognized for a traditional bachelor’s degree. Additionally, this degree will honor the past experiences of applicants through the credit for prior learning process. Adding a BAS in Applied Management to their existing technical skill sets makes these graduates highly desirable, potential employees. While meeting the needs of local employers for employees with higher-
level thinking and management skills, these students will also advance to higher-paying positions.

B. Contribute more to the production of baccalaureate degrees.

The BAS in Applied Management addresses a unique niche in the applied management market. Our goal is to establish broader institutional and educational pathways internally and externally. The degree serves both our career and technical and transfer programs, offering students a seamless pathway from high school, through Tech Prep and Running Start articulations, to the Bachelors of Applied Science degree.

The Strategic Master Plan for Higher Education in Washington State also focuses on strengthening state and local economies by meeting the demands for a well-educated and skilled workforce and supporting student success. The Strategic Plan at Clark College likewise includes expanding the educational opportunities in Southwest Washington in all demographic groups to insure positive job growth. The college is based in a dynamic, expanding economy, with outreach by local government sectors, port authorities, economic development councils, and business associations.

The BAS in Applied Management serves to facilitate student success with a reliable track into the managerial levels of industry – seamlessly. It is a progressive step from our technically-oriented programs to the managerial and leadership levels. This, in turn, will strengthen workforce motivation, as technical, hands-on expertise becomes professionalized to manage others.

The BAS in Applied Management will be innovative and forward-looking to incorporate our logistical hub at the center of north/south and east/west transportation systems, with our close proximity to both air and sea ports that facilitate our manufacturing and retailing base. Clark College will incorporate change and global understanding, while focusing on the needs of its constituents – the students, the employers, and society as a whole.

3. Criteria: Employer/community demand for graduates with baccalaureate level of education proposed in this program

This section, Criteria 3, contains three parts; the first part addresses the community demand for career and technical graduates; the second part summarizes the interviews with local employers; and the third part provides the survey synopsis from some of the members of the advisory committees of the career and technical programs at Clark College.
Regional Demand- Graduates in the BAS Program

Clark College promotes and advances the State’s CTC system 2007, standing as the fourth most-productive in the nation\(^2\). Clark College’s proposal to develop its BAS in Applied Management supports the partnership between Clark College and the state community and technical college system. It is also linked to its strategy to support the state goals of increasing the number of applied baccalaureate programs awarded by 2019. Clark College values the necessity to expand the workforce mission of community and technical colleges, by reducing obstacles to students’ progress into higher wage earning categories. The strategic goal to serve the needs of local and state employers by increasing educational opportunities and pathways is a relevant one. Clark College’s present and future student populations can exercise educational options to reach their personal and professional goals. Clark College’s diverse student population will have increased opportunity with the BAS in Applied Management degree.

Will these graduates have the opportunity to find jobs in the local region? Opportunity for employment depends on students’ marketable skills and employer demand for those students. The college is actively engaged to plan the BAS in Applied Management curriculum and support systems to ensure that our graduates will have up-to-date skills and necessary credentials that employers value and need. The following discussion and tables present evidence of local demand.

The demand for management skills in our employer region of the Portland/Vancouver metropolitan area has a number of occupational categories projected to grow by more than 10% by 2020\(^3\). The BAS in Applied Management, with its large platform of technical programs, serves both areas well. Computer and Information Systems Managers, Medical and Health Service Managers, and Preschool and Childcare Center/Program industries are expected to see double digit increases as well. Each of these fields anticipates growth rates above the regional Southwest Washington average for all management positions of 9%. The table on the following page presents selected target industries and presents examples with top job growth in the six-county Portland/Vancouver metropolitan area requiring a bachelor’s degree or higher level of educational attainment.

\(^3\) Economic Modeling Specialists Intl (EMSI) Analyst Data, Searched January 2015. Available at http://www.economicmodeling.com/
Management Occupations With Average Entry-Level Education of Bachelor's Degree
Clark, Skamania, Klickitat WA and Multnomah, Washington, Clackamas OR

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Administrators, Preschool and Childcare Center/Program</td>
<td>583</td>
<td>686</td>
<td>103</td>
<td>18%</td>
<td>35</td>
<td>$20.85</td>
</tr>
<tr>
<td>Medical and Health Services Managers</td>
<td>2,070</td>
<td>2,371</td>
<td>301</td>
<td>15%</td>
<td>105</td>
<td>$52.39</td>
</tr>
<tr>
<td>Social and Community Service Managers</td>
<td>2,017</td>
<td>2,285</td>
<td>268</td>
<td>13%</td>
<td>90</td>
<td>$29.18</td>
</tr>
<tr>
<td>Human Resources Managers</td>
<td>1,177</td>
<td>1,329</td>
<td>152</td>
<td>13%</td>
<td>59</td>
<td>$46.62</td>
</tr>
<tr>
<td>Construction Managers</td>
<td>2,847</td>
<td>3,199</td>
<td>352</td>
<td>12%</td>
<td>107</td>
<td>$42.13</td>
</tr>
<tr>
<td>Training and Development Managers</td>
<td>244</td>
<td>273</td>
<td>29</td>
<td>12%</td>
<td>12</td>
<td>$45.57</td>
</tr>
<tr>
<td>Education Administrators, All Other</td>
<td>374</td>
<td>418</td>
<td>44</td>
<td>12%</td>
<td>18</td>
<td>$31.94</td>
</tr>
<tr>
<td>Computer and Information Systems Managers</td>
<td>3,303</td>
<td>3,664</td>
<td>361</td>
<td>11%</td>
<td>109</td>
<td>$52.85</td>
</tr>
<tr>
<td>General and Operations Managers</td>
<td>15,563</td>
<td>17,249</td>
<td>1,686</td>
<td>11%</td>
<td>590</td>
<td>$42.72</td>
</tr>
<tr>
<td>Chief Executives</td>
<td>1,597</td>
<td>1,770</td>
<td>173</td>
<td>11%</td>
<td>65</td>
<td>$97.32</td>
</tr>
<tr>
<td>Marketing Managers</td>
<td>2,706</td>
<td>2,994</td>
<td>288</td>
<td>11%</td>
<td>110</td>
<td>$45.49</td>
</tr>
<tr>
<td>Compensation and Benefits Managers</td>
<td>94</td>
<td>104</td>
<td>10</td>
<td>11%</td>
<td>4</td>
<td>$47.74</td>
</tr>
<tr>
<td>Administrative Services Managers</td>
<td>2,127</td>
<td>2,347</td>
<td>220</td>
<td>10%</td>
<td>74</td>
<td>$37.03</td>
</tr>
<tr>
<td>Financial Managers</td>
<td>4,125</td>
<td>4,533</td>
<td>408</td>
<td>10%</td>
<td>150</td>
<td>$48.82</td>
</tr>
<tr>
<td>Architectural and Engineering Managers</td>
<td>2,584</td>
<td>2,829</td>
<td>245</td>
<td>9%</td>
<td>108</td>
<td>$64.21</td>
</tr>
<tr>
<td>Advertising and Promotions Managers</td>
<td>276</td>
<td>299</td>
<td>23</td>
<td>8%</td>
<td>13</td>
<td>$38.98</td>
</tr>
<tr>
<td>Purchasing Managers</td>
<td>720</td>
<td>780</td>
<td>60</td>
<td>8%</td>
<td>27</td>
<td>$45.24</td>
</tr>
<tr>
<td>Emergency Management Directors</td>
<td>49</td>
<td>53</td>
<td>4</td>
<td>8%</td>
<td>NA</td>
<td>$42.21</td>
</tr>
<tr>
<td>Sales Managers</td>
<td>3,765</td>
<td>4,066</td>
<td>301</td>
<td>8%</td>
<td>134</td>
<td>$48.32</td>
</tr>
<tr>
<td>Public Relations and Fundraising Managers</td>
<td>941</td>
<td>1,011</td>
<td>70</td>
<td>7%</td>
<td>33</td>
<td>$36.93</td>
</tr>
<tr>
<td>Natural Sciences Managers</td>
<td>607</td>
<td>646</td>
<td>39</td>
<td>6%</td>
<td>20</td>
<td>$48.58</td>
</tr>
<tr>
<td>Industrial Production Managers</td>
<td>1,688</td>
<td>1,793</td>
<td>105</td>
<td>6%</td>
<td>50</td>
<td>$43.58</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td><strong>49,459</strong></td>
<td><strong>54,697</strong></td>
<td><strong>5,242</strong></td>
<td><strong>9%</strong></td>
<td><strong>1,908</strong></td>
<td><strong>NA</strong></td>
</tr>
</tbody>
</table>
The following table includes completions in Business Administration and Management and Business/Commerce for 2012-2013.4

<table>
<thead>
<tr>
<th>College</th>
<th>Undergraduate Certificates</th>
<th>Associates Degree</th>
<th>Bachelor’s Degrees</th>
<th>Master’s Degree</th>
<th>Total Completions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clark College</td>
<td>5</td>
<td>74</td>
<td>NA</td>
<td>NA</td>
<td>79</td>
</tr>
<tr>
<td>Lower Columbia</td>
<td>43</td>
<td>38</td>
<td>NA</td>
<td>NA</td>
<td>81</td>
</tr>
<tr>
<td>PCC</td>
<td>0</td>
<td>117</td>
<td>NA</td>
<td>NA</td>
<td>117</td>
</tr>
<tr>
<td>PSU</td>
<td>0</td>
<td>0</td>
<td>123</td>
<td>106</td>
<td>229</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>229</td>
<td>123</td>
<td>106</td>
<td>506</td>
</tr>
</tbody>
</table>

Note: Washington State University Vancouver does not report data to IPEDS for the Vancouver campus alone. Data is combined for all WSU campuses, so we are unable to provide the number of graduates from WSU-V in Business. However, the total number of graduates for all WSU campuses with both a bachelor’s and master’s degree in Business Administration and Management was 116.

Clark College emphasizes that BAS stakeholders are well represented. Stakeholders includes the following: Clark College CTE division leadership, Business Advisory Board members, Clark College Unit Deans and the two main transfer institutions for Clark College students, Washington State University at Vancouver and Portland State University. The BAS in Applied Management is differentiated from the Washington State University Vancouver degree. The Clark College BAS is designed to serve career and technical occupations and regional place-bound students. Average annual openings for business management jobs in the greater Portland-Vancouver area are forecast to grow to 5242 in the next ten years. The gap between available jobs and trained applicants from our region is significant.

Our data and information about the BAS in Applied Management are consistent with research conducted by Scott Bailey, the Regional Economist, at the Washington Employment Security Department.

**BAS Management Degree - Employer Interviews**

The support for the BAS Management degree required feedback from local employers and non-profits. A questionnaire was designed and interviews with these various employers were conducted during the spring and summer of 2013.

Thirty-six employers of different sizes, ranging from smaller employers (4 employees) to larger (1000s or more employees,) were contacted for personal interviews. Additionally, those employers represented various types and levels of business, to include

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4 NCES College Navigator [http://nces.ed.gov/collegenavigator/]
manufacturing, retailing, and services, both profit and non-profit. Each interview lasted an average of one hour. For a summary of the names, types, and sizes of the organizations contacted, see the table below.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Type of Organization</th>
<th>Product/Service</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Camas</td>
<td>Government</td>
<td>Services</td>
<td>175</td>
</tr>
<tr>
<td>City of Washougal</td>
<td>Government</td>
<td>Services</td>
<td>80</td>
</tr>
<tr>
<td>Skamania County General Services</td>
<td>Government</td>
<td>Law Enforcement/Judicial</td>
<td>85</td>
</tr>
<tr>
<td>Cadet</td>
<td>Manufacturing</td>
<td>Electrical Heaters</td>
<td>101</td>
</tr>
<tr>
<td>Columbia Machine</td>
<td>Manufacturing</td>
<td>Concrete Machines/Solutions</td>
<td>375</td>
</tr>
<tr>
<td>Columbia Sportswear</td>
<td>Manufacturing</td>
<td>Apparel</td>
<td>3500 **</td>
</tr>
<tr>
<td>Georgia Pacific</td>
<td>Manufacturing</td>
<td>Paper Products</td>
<td>519</td>
</tr>
<tr>
<td>Hewlett- Packard</td>
<td>Manufacturing</td>
<td>High-Tech Products</td>
<td>3500 **</td>
</tr>
<tr>
<td>Intel</td>
<td>Manufacturing</td>
<td>Chip Manufacturer</td>
<td>17000 **</td>
</tr>
<tr>
<td>MAXCESS International</td>
<td>Manufacturing</td>
<td>Web Converting Equipment</td>
<td>76</td>
</tr>
<tr>
<td>Nike</td>
<td>Manufacturing</td>
<td>Apparel</td>
<td>7000 **</td>
</tr>
<tr>
<td>Pac Paper, Inc.</td>
<td>Manufacturing</td>
<td>Paper Converter</td>
<td>100</td>
</tr>
<tr>
<td>Redpoint International, Inc.</td>
<td>Manufacturing</td>
<td>Medical Supplies</td>
<td>5</td>
</tr>
<tr>
<td>Nautilus, Inc.</td>
<td>Manuf/Retailing</td>
<td>Fitness Equipment</td>
<td>310</td>
</tr>
<tr>
<td>EOCF (Head Start)</td>
<td>Non-Profit</td>
<td>Social Services</td>
<td>240</td>
</tr>
<tr>
<td>New Seasons Market</td>
<td>Retailing</td>
<td>Specialty Food</td>
<td>2400 *</td>
</tr>
<tr>
<td>Safeway</td>
<td>Retailing</td>
<td>Food</td>
<td>Varies</td>
</tr>
<tr>
<td>Starbucks</td>
<td>Retailing</td>
<td>Coffee/Food/Hardline</td>
<td>5</td>
</tr>
<tr>
<td>Target</td>
<td>Retailing</td>
<td>Hard/Soft Lines</td>
<td>75</td>
</tr>
<tr>
<td>ABM</td>
<td>Service</td>
<td>Janitorial</td>
<td>400</td>
</tr>
<tr>
<td>AT&amp;T</td>
<td>Service</td>
<td>Telecommunications</td>
<td>100</td>
</tr>
<tr>
<td>Chase</td>
<td>Service</td>
<td>Banking/Financing</td>
<td>12</td>
</tr>
<tr>
<td>Clark Public Utilities</td>
<td>Service</td>
<td>Electric and Water Utilities</td>
<td>360</td>
</tr>
<tr>
<td>Columbia Credit Union</td>
<td>Service</td>
<td>Banking/Financing</td>
<td>250</td>
</tr>
<tr>
<td>Farmers Insurance</td>
<td>Service</td>
<td>Insurance</td>
<td>4</td>
</tr>
<tr>
<td>Hi-Way Fuel</td>
<td>Service</td>
<td>Automotive Repair</td>
<td>25</td>
</tr>
<tr>
<td>Olson Engineering, Inc.</td>
<td>Service</td>
<td>Consulting Engineers</td>
<td>23</td>
</tr>
<tr>
<td>Southwest Medical Center</td>
<td>Service</td>
<td>Healthcare and Wellness</td>
<td>3400</td>
</tr>
<tr>
<td>Riverview Bank</td>
<td>Service</td>
<td>Banking/Financing</td>
<td>245</td>
</tr>
<tr>
<td>Second Step Housing (non-profit)</td>
<td>Service</td>
<td>Social Services/Housing</td>
<td>16</td>
</tr>
<tr>
<td>Skamania Chamber of Commerce</td>
<td>Service</td>
<td>Public Relations</td>
<td>275</td>
</tr>
<tr>
<td>Skamania Lodge</td>
<td>Service</td>
<td>Hospitality</td>
<td>325-425</td>
</tr>
<tr>
<td>Sprague Pest Solutions</td>
<td>Service</td>
<td>Pest Control</td>
<td>195 *</td>
</tr>
<tr>
<td>UPS</td>
<td>Service</td>
<td>Shipping/Delivering</td>
<td>5</td>
</tr>
<tr>
<td>Washougal School District</td>
<td>Service</td>
<td>Education</td>
<td>360</td>
</tr>
</tbody>
</table>
The main focus of this questionnaire was to gather data from local employers, regarding the skills they require in college graduates, their compensation, and employment opportunities. The following is the summary of their responses:

- Over half of the organizations (53%) promote managers from within, while only 14% hire from the outside. The remaining employers use both internal and external hiring practices.

- When asked about the managerial skills that are most lacking in new hires in management, the following shows the top skills that were reported:

<table>
<thead>
<tr>
<th>Skill</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology/basic computer</td>
<td>29</td>
<td>81%</td>
</tr>
<tr>
<td>Problem solving</td>
<td>28</td>
<td>78%</td>
</tr>
<tr>
<td>Critical thinking</td>
<td>28</td>
<td>78%</td>
</tr>
<tr>
<td>Conflict resolution</td>
<td>27</td>
<td>75%</td>
</tr>
<tr>
<td>Versatility/adaptability</td>
<td>26</td>
<td>72%</td>
</tr>
<tr>
<td>Team work</td>
<td>26</td>
<td>72%</td>
</tr>
<tr>
<td>Ethics/integrity</td>
<td>24</td>
<td>67%</td>
</tr>
<tr>
<td>Initiative/self confidence</td>
<td>24</td>
<td>67%</td>
</tr>
<tr>
<td>Oral/verbal communication</td>
<td>24</td>
<td>67%</td>
</tr>
<tr>
<td>Writing/written communication</td>
<td>23</td>
<td>64%</td>
</tr>
<tr>
<td>Relationship with co-workers</td>
<td>22</td>
<td>61%</td>
</tr>
<tr>
<td>Math</td>
<td>19</td>
<td>53%</td>
</tr>
<tr>
<td>Ability to accept supervision</td>
<td>18</td>
<td>50%</td>
</tr>
<tr>
<td>Accounting</td>
<td>18</td>
<td>50%</td>
</tr>
<tr>
<td>Effective citizenship</td>
<td>17</td>
<td>47%</td>
</tr>
</tbody>
</table>

Others key skills mentioned were time management, cultural awareness, customer service, eBusiness, change management, and social media.

In response to the question about skills and qualities needed for future managerial and workplace changes, the following were the top areas given by our interviewees: social media, technology, understanding international business, eBusiness, project management, customer service, cost accounting and finance, and marketing development for non-profits.
The responses on compensation varied widely. The following are some of the most common comments made by the employers in regard to compensation:

- Compensation depends on experience;
- Four-year degree holders make 10% to 20% higher wages and salaries than those without four-year degrees;
- Some companies hire only four-year-degree holders for management positions;
- Some companies, especially those that are technically-based, give more weight to skilled candidates.

In response to what kinds of positions Clark College graduates of a four-year, applied management degree would qualify, the responses varied, depending on the industry. Here are some of the common responses:

- Most prefer coupling a management degree with technical experience for someone to be considered for a management or supervisory position;
- A management degree holder with no experience will ensure an entry-level or a paid internship position;
- Some employees hire managers through internal promotions;
- Other qualified positions for BAS in Applied Management candidates include customer service manager, assistant branch manager, financial manager, and sales representative.

In response to the question about the productivity of the organization and the opportunities for an employee finishing this degree to advance, most affirmed that productivity will increase, as the employee understands the bigger picture and the functions of the business better. Also, the chances of advancement will increase, as the individual is now able to lead, resolve problems, and understand the strategic goals of the organization.

In response to the question about what support employers would offer employees trying to finish a management degree while working, the most common ways provided were the following:

- Tuition reimbursement
- A flexible work schedule
- Paid internship programs (some with benefits)

In all, the responses to the questions in the interview were very positive. The responses provided valuable information upon which Clark College will build its upper-level program in Applied Management.

BAS Management Degree- Advisory Committee Survey

Every professional/technical degree program at Clark College must continually be evaluated by employees and employers in every specific occupational field. This ongoing assessment by local professionals ensures the professional education degrees and certificates respond to the rapidly changing labor market. Since these professionals are consulted on the development of curricula, their input is extremely valuable.
During Summer 2013, Business Division faculty asked members of the advisory committees to participate in an online survey to determine interest in this degree and to gather feedback about impact on career opportunities and the community need for a bachelor’s degree in the field. A total of 34 responses were collected out of 287 members, which is a 12% response rate.

This survey may not be a fully representative sample of the advisory committee member views on the Bachelor of Applied Science in Management degree. Only a small proportion (12%) of advisory committee members responded to the survey (34 respondents) which was voluntary. This survey was not intended to be representative of the career and technical fields throughout the community but used in conjunction with the employer interviews, to learn more about the potential impact on career opportunities, and community need for a bachelor’s degree in the field.

Survey results indicated a general interest in the Bachelor of Applied Science in Management degree by career and technical agencies in the community. The top five skills identified as lacking in new employees included conflict resolution, critical thinking, effective decision making, problem-solving, and writing/written communication. Common themes throughout the open-ended questions of the survey indicated that the current managerial process includes hard work, development of interpersonal and leadership skills, and taking increasingly responsible positions within the organization.

Development of a four-year degree may provide increased employment opportunities, an accelerated timeline to management positions, and a complementary blend of business management skills in addition to technical skills; however, there is a large amount of variation on whether there is a monetary difference in compensation by type of career or technical program.

Respondents indicated that Clark College could fill a current void in local management training, as there is limited access to managerial training programs within the career and technical fields, except for internal, company-based training programs. However, there was not a consensus on whether there is a need in career and technical fields for a Bachelor of Applied Science in Management degree.

4. Criteria: Applied baccalaureate program builds from existing professional and technical degree programs offered by the institution

The BAS in Applied Management builds from existing CTE programs at Clark College to junior-senior level courses to prepare students for small business ownership, entrepreneurship, and leadership and managerial positions. Our employers’ surveys show a need for this educational preparation in all fields, to support training and workforce needs of businesses and non-profits.
The BAS in Applied Management directly links to the existing two-year Associate of Applied Science in Management, Business, Accounting, and Marketing degrees. Work is underway to develop additional two-year degrees in International Business and Retail Management.

<table>
<thead>
<tr>
<th>Business/Management/Marketing/Accounting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
</tr>
<tr>
<td>2007- 2008</td>
</tr>
<tr>
<td>2008- 2009</td>
</tr>
<tr>
<td>2009- 2010</td>
</tr>
<tr>
<td>2010- 2011</td>
</tr>
<tr>
<td>2011- 2012</td>
</tr>
<tr>
<td>2012- 2013</td>
</tr>
<tr>
<td>2013- 2014</td>
</tr>
</tbody>
</table>

In addition to Clark College’s growing CTE programs, which will prove to be the main source of enrollment for the BAS program, students majoring in Business Administration who intend to transfer to four-year institutions may also find the BAS program a viable choice for continuing their educational pathways. The numbers in the chart below reflect potential enrollees into the BAS program.

<table>
<thead>
<tr>
<th>Business Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
</tr>
<tr>
<td>2007- 2008</td>
</tr>
<tr>
<td>2008- 2009</td>
</tr>
<tr>
<td>2009- 2010</td>
</tr>
<tr>
<td>2010- 2011</td>
</tr>
<tr>
<td>2011- 2012</td>
</tr>
<tr>
<td>2012- 2013</td>
</tr>
<tr>
<td>2013- 2014</td>
</tr>
</tbody>
</table>
Annual completions in two-year CTE programs (associate degree or certificate requiring 90 or more credit hours) are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Completions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-2008</td>
<td>324</td>
</tr>
<tr>
<td>2008-2009</td>
<td>336</td>
</tr>
<tr>
<td>2009-2010</td>
<td>390</td>
</tr>
<tr>
<td>2010-2011</td>
<td>456</td>
</tr>
<tr>
<td>2011-2012</td>
<td>444</td>
</tr>
<tr>
<td>2012-2013</td>
<td>523</td>
</tr>
<tr>
<td>2013-2014</td>
<td>560</td>
</tr>
</tbody>
</table>

5. Criteria: Student Demand for Program within the Region

Positive and encouraging demand for the Clark College BAS is documented in the student survey, conducted during Spring 2013. The results show that more than 65% of the students surveyed are interested in the BAS pathway, leading from CTE programs.

**Methodology:** The Business Division asked faculty members in each of the CTE programs at Clark College to administer a survey to students in an upper-level class, typically taken by students who are enrolled in that program. The purpose of the survey was to gauge the interest of these students in pursuing a four-year degree in Applied Management. The students surveyed were from 22 CTE programs. A total of 562 responses were collected, with 83 percent of them coming from a two-year certificate program, an Associates of Applied Science (AAS), or an Associate of Applied Technology (AAT) degree area. Over the last five years, students completing Clark College CTE programs averaged 428 students per year.

**Results**

Sixty-five percent were very interested or somewhat interested in pursuing a Bachelor of Science in Applied Management at Clark College. As for the timeline of offering the program, more than 63% of the interested students indicated their willingness to enroll if the program were to start in Fall 2014.
Out of all the CTE programs at Clark College that were surveyed, the following chart shows the eleven programs, along with their years in existence, that have a 60% or higher degree of student interest in pursuing a BAS in Applied Management degree.

<table>
<thead>
<tr>
<th>Name of Program</th>
<th>Year Established</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Technology</td>
<td>Pre 1976</td>
</tr>
<tr>
<td>Medical Information</td>
<td>2002</td>
</tr>
<tr>
<td>Medical Assistant</td>
<td>2002</td>
</tr>
<tr>
<td>Fitness</td>
<td>2004</td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>2002</td>
</tr>
<tr>
<td>Diesel Technology</td>
<td>Pre 1976</td>
</tr>
<tr>
<td>Cooking and Restaurant Management</td>
<td>Pre 1976</td>
</tr>
<tr>
<td>Computer Support Specialist</td>
<td>Pre 1976</td>
</tr>
<tr>
<td>Computer Graphics Technology</td>
<td>2002</td>
</tr>
<tr>
<td>Business Administration</td>
<td>Pre 1976</td>
</tr>
<tr>
<td>Baking and Bakery Management</td>
<td>Pre 1976</td>
</tr>
</tbody>
</table>

Note: For complete and specific professional technical degree titles, please refer to Appendix C

In addition to Clark College students, the BAS has substantial demand potential with community colleges in the Greater Portland area through reciprocal state agreements and more remote, outlying counties such as Skamania that are easily served with online offerings. The potential would include our promoting the Clark College BAS in Applied Management programs at other local colleges such as Portland Community College (all campuses), Mount Hood Community College, Clackamas Community College, and Lower Columbia College.

Other potential student targets include: Clark College transfer students, place-bound students, and working students already employed with needs and aspirations to upgrade in management programs and job advancement. Veterans, physically challenged populations, and an increasingly large pool of formerly employed and experienced workers in need of retooling skills due to industry restructuring will also be considered.

Clark’s survey incorporated the degree areas that include technical health, services, business, and technology. The strategy to recruit students from the two-year programs for the BAS degree in Management is positively anticipated by the majority of students surveyed. With this information, the BAS in Applied Management will focus on both industry and student demands, to customize and to improve the BAS degree program on an on-going basis, reflecting the present needs as well as anticipated changes in demand to serve community economic development and growth.
### Enrollment Projections

<table>
<thead>
<tr>
<th></th>
<th>Fall 15</th>
<th>Fall 16</th>
<th>Fall 17</th>
<th>Fall 18</th>
<th>Fall 19</th>
<th>Fall 20</th>
<th>Fall 21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 0</td>
<td>N/A</td>
<td>35</td>
<td>35</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1st Cohort</td>
<td>N/A</td>
<td>35</td>
<td>35</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2nd Cohort</td>
<td>N/A</td>
<td>35</td>
<td>35</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3rd Cohort</td>
<td>N/A</td>
<td>35</td>
<td>35</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4th Cohort</td>
<td>N/A</td>
<td>35</td>
<td>35</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5th Cohort</td>
<td>N/A</td>
<td>35</td>
<td>35</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>70</td>
</tr>
</tbody>
</table>

### 6. Criteria: Efforts to Maximize State Resources to Serve Place-bound Students

Clark College is dedicated to serving students in demographic groups. The college continues its mission to identify and support students who may be place-bound due to home care responsibilities, disabilities, or geographic location challenges. To meet this end, Clark College has designed multiple, diverse delivery systems to provide educational access to its stakeholders based in Clark, West Klickitat, and Skamania Counties.

A. Clark College’s main campus is strategically located on the I-5 corridor and its main arterials. It is easily accessed by multiple private and public modes of transportation.

B. Clark College uses state-of-the-art technology to offer online, hybrid, and technology-enhanced face-to-face classes. Students can choose from a myriad of options to attend on-campus, hybrid, or eLearning classes. The BAS in Applied Management will utilize the existing technology to offer some of its courses online, allowing students to access their classes from wherever they are located.

C. The BAS in Applied Management degree at Clark College epitomizes efficiency in using both local and state resources, by offering a seamless transition from the technical AA degree to progress to the higher-level management degree. Clark College students will have a familiar routine when moving to the next step by expanding their options and opportunities as employees. This, in turn, will provide their employers with a predictable time-line for scheduling and for helping to facilitate the students’ continuing educational goals.
D. There are no direct competitors for Clark College’s BAS in Applied Management because this degree is grounded in specific, technical skills offered at Clark College. Only Lower Columbia College (LCC) in Longview, Washington, has some similar technical programs. Therefore, some minimal overlap may occur, but this is seen as a positive in that students located at the borders of both colleges will have options to take classes at LCC if they have scheduling complications at Clark or in reverse, at LCC.

E. The conventional Bachelor of Arts (BA) in Management is offered at five, four-year colleges or universities within a fifteen-mile radius of Clark College. They include:

- Two public institutions: Washington State University, Vancouver and Portland State University, Portland.
- Three private institutions: University of Portland, Portland; Concordia University, Portland; and Charter College, Vancouver. Numerous online Universities offering a four-year management degree include: Western Governor’s University, City University, and University of Phoenix.

Clark College’s collaboration with other institutions will be encouraged for possible course transfers or course supplements. The BAS in Applied Management will advance its agreements and discussions in terms of seamless articulations with other schools.

The Clark College BAS in Applied Management curriculum will be designed to provide the student with paid internship opportunities with employers in the Southwest Washington and Greater Portland areas. Special emphasis will be placed on linking the student with organizations in the student’s chosen field as well as the expanded opportunities in international trade, logistics, and supply chain management.

Clark College’s futuristic outlook will be embedded in the BAS in Applied Management. By synthesizing this program to umbrella our technical programs, Clark College will teach students to be flexible and resilient in our rapidly changing business environment. Most importantly, our students will be prepared to become leaders in their chosen fields as employees and to have additional options to undertake entrepreneurial ventures, as independent business owners or subcontractors.

Nearby institutions visited:

As early as December 2013, and shortly after a task team was formed, Clark College reached out to Washington State University in Vancouver (WSU-V) to inform the Administration and the Business faculty of its intention to offer an applied degree in Management.

A team from Clark consisting of Dean Blake Bowers (Dean of Business and Health Sciences), Professor Patti Serrano (Chair of the BAS in Management Committee) and Dr. Adnan Hamideh (Business Division Chair) visited the Business Division at WSU-V and had a meeting with Dr. Renny Christopher (Vice Chancellor of Academic Affairs) and Dr. Jane Cote (Academic Director of Business).
In this meeting, the Clark team explained that the BAS degree that it intends to offer is designed mainly for the Career and Technical Education students who graduate with a two-year AAS or AAT degrees. The vast majority of these students have no intention of spending another four years to attain a Bachelor’s degree in Management. The WSU-V team was assured that the BAS in Management that will be offered by Clark will in no way compete with their Management degree. As a matter of a fact, it will be a very credible source to potentially feed WSU-V’s Business graduate program.

Clark pledged to consult with and keep WSU-V updated on the progress of applying for the BAS program. A second visit to WSU-V was made by Dr. Tim Cook (the Vice President of Instructions), Dean Bowers and Professor Patti Serrano during summer of 2014 to keep the university updated. WSU-V offered to provide one of the external evaluators needed to attain accreditation for the BAS program.

Centralia College was another institution that was visited by a team of BAS. The director of the BAS in Management at Centralia (Mr. Larry McGee) was more than hospitable and welcoming. He and his assistant (Ms. Jana Fraley) answered all of our questions and shared all the information that we asked for. We are in constant contact with Centralia, hoping to duplicate their success and avoid any mistakes they may have made.
Appendix A

Business Administration Advisory Committee Approval

October 9, 2013

The Business Administration Division (BEAM),

As the chair of the Clark College Business Administration Advisory Committee, I would like to inform you that on October 8, 2013, the committee reviewed and discussed the draft for the Clark College Bachelor of Applied Science (BAS) in Management Degree Program. At the meeting it was unanimously decided by the committee to approve the draft and to encourage the BAS Management Taskforce at Clark College to continue in completing the process and to apply to the College and Washington State Board for Community and Technical Colleges for approval of the Bachelor of Applied Science in Management at Clark College.

The committee is excited to see this program moving forward, as this degree will be a great benefit to our community.

Sincerely,

Michelle Thor
Clark College - Business Administration Advisory Committee Chair
Appendix B

SAMPLE EMPLOYER INTERVIEW

FOUR-YEAR APPLIED SCIENCE – MANAGEMENT DEGREE

Organization: ____________________________________________________________

Description of Organization _____________________________________________

______________________________________________________________________

Product/Service: _______________________________________________________

Number of Employees: _________________________________________________

Contact Person: ___________ Position: _________________________________

Years of Experience in this industry: _________________________________

______________________________________________________________

1. Please describe your organization

2. What types of skilled workers do you employ?

3. Would you describe a career pathway for someone progressing in your organization?

4. How many managers are currently employed by your organization? ______

   Supervisory (Entry Level)? _____ Middle? _____ Upper? _____

5. What are the responsibilities of these managers?
   Entry Level:
   Middle:
   Upper:

6. How do you typically hire new managers? Prompts: internal promotions, external, other

7. Which managerial skills do you find to be lacking, especially in new managers?
8. Are you outsourcing any management tasks? If so, what management positions and to what type of organization? Prompts: a service, an agency, or an independent contractor

9. Please describe your organization’s managerial training, if you offer any. Prompts: Seminars, on the job, workshops, etc.

10. Presently, what are the most important skills (managerial, technical, and professional) needed for a management position at your organization?

<table>
<thead>
<tr>
<th>Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem solving</td>
</tr>
<tr>
<td>Critical thinking</td>
</tr>
<tr>
<td>Versatility/adaptability</td>
</tr>
<tr>
<td>Ethics/integrity</td>
</tr>
<tr>
<td>Initiative/self confidence</td>
</tr>
<tr>
<td>Conflict Resolution</td>
</tr>
<tr>
<td>Relationship with co-workers</td>
</tr>
<tr>
<td>Effective citizenship</td>
</tr>
<tr>
<td>Team work</td>
</tr>
<tr>
<td>Ability to accept supervision</td>
</tr>
<tr>
<td>Technology/basic computer</td>
</tr>
<tr>
<td>Writing/written communication</td>
</tr>
<tr>
<td>Oral/verbal communication</td>
</tr>
<tr>
<td>Math</td>
</tr>
<tr>
<td>Accounting</td>
</tr>
<tr>
<td>Other Skills</td>
</tr>
</tbody>
</table>

11. What other skills do you foresee as essential in the near future for managers, so that Clark College can include them in its proposed four-year Applied Science in Management degree? Prompt: Please comment on your industry or in management in general

12. As regards monetary compensation, what would an individual with a four-year Applied Science degree in Management degree earn in comparison to a skilled individual with a two-year associate/technical degree in a management position in your organization?
13. For what positions would a graduate of Clark College’s four-year Applied Science in Management degree be qualified at your organization?

14. In your opinion, how would a four-year Applied Science in Management degree increase productivity and the opportunities for advancement in your organization?


16. What other organizations would you recommend for us to contact and interview for additional information?

17. Do you have any other comments to share?

Thank you so much for your time and consideration.

Name of Interviewer: ________________________________

Date of Interview: ________________________________

Place of Interview: ________________________________

Please return all interview sheets to:

Clark College
Jennifer Lea
Business Division/SHL 116
1933 Fort Vancouver WA
Vancouver, WA 98663
jlea@clark.edu
Appendix C

The following are the Professional and Technical Two-year degrees offered at Clark College that will support the BAS in Applied Management Program

<table>
<thead>
<tr>
<th>No.</th>
<th>Prof/Tech Degree Title</th>
<th>Type</th>
<th>No.</th>
<th>Prof/Tech Degree Title</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Accounting</td>
<td>AAS</td>
<td>22</td>
<td>Merchandising Management</td>
<td>AAS</td>
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<td>Web/Graphic Design</td>
<td>AAT</td>
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<tr>
<td>19</td>
<td>Fitness Trainer</td>
<td>AAS</td>
<td>40</td>
<td>Web Development</td>
<td>AAT</td>
</tr>
<tr>
<td>20</td>
<td>Instrumentation/Control Automation</td>
<td>AAT</td>
<td>41</td>
<td>Welding</td>
<td>AAS</td>
</tr>
<tr>
<td>21</td>
<td>Legal Administrative Assistant</td>
<td>AAS</td>
<td>42</td>
<td>Welding</td>
<td>AAT</td>
</tr>
</tbody>
</table>

AAS  Associate in Applied Science  
AAT  Associate in Applied Technology  
AAS-T  Associate in Applied Science - Transfer
Early Childhood Education
Bachelor of Applied Science

Statement of Need
North Seattle College
March 2015
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Cover Sheet, Statement of Need

Program Information

Program Name: Early Childhood Education
Institution Name: Seattle Colleges—North Seattle College (Lead)
Degree: BAS Early Childhood Education CIP Code: 13-1210

Name of existing technical associate degree(s) that will serve as the foundation for this program:
North Seattle College:
Degree: Early Childhood Education AAS CIP Code: 13-1210 Year Began: 1985
Degree: ECE AAS-T CIP Code: 13-1210 Year Began: Forthcoming 2015
Seattle Central College:

Proposed Start Implementation Date: Winter 2016
Projected Enrollment (FTES) in Year One: 20 at Full Enrollment by Year: 4 (50 FTES)
Funding Source: Self-Support

Mode of Delivery

Single Campus Delivery: Operated by North Seattle College with North Seattle faculty. Instruction will be delivered at a community location/college teaching site in central Seattle, Washington
Distance Learning: Some courses will be hybrid, synchronous distance, or online.

Contact Information

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Title: Executive Dean, Career/Workforce Education
Address: 9600 College Way N., Seattle, WA 98103-3599
Telephone: (206) 934-4606
Fax: (206) 934-3606
Email: john.lederer@seattlecolleges.edu

Chief Academic Officer, Interim Vice-President of Instruction Date

02/26/2015
Introduction to the degree

North Seattle College proposes to develop a bachelor of applied science (BAS) degree in Early Childhood Education as a pathway to employment as a lead teacher or director in a preschool or early learning classroom. Baccalaureate capacity in the Seattle area is very limited even though 25% of preschool teachers hold a bachelor’s degree or higher. Federal, state and local policy changes designed to professionalize the occupation are also pushing up demand for baccalaureate-trained preschool teachers.

Over the past two decades, a growing body of brain science research has demonstrated that early childhood is a period of rapid brain development and learning with life-long consequences. Studies show that when children start school behind, they stay behind. Mothers of pre-school children are working at historically high rates. City, state, and national policymakers have responded to these findings.

In November 2014, Seattle voters passed Proposition 1-B, “Pre-K for All”, a pilot project making high-quality preschool available and affordable for 2,000 Seattle children. In 2013, Washington State pledged to create over 10,000 spots in the state-funded Early Childhood Education and Assistance Preschool (ECEAP) expansion. The national Head Start program has established a goal that 50 percent of its teachers hold a bachelor’s degree. While this Head Start goal has been satisfied in Washington State, our state was one of just nine states to receive the $60 million Race to the Top: Early Learning Challenge Grant for 2011-15.

To meet criteria for high-quality pre-K, teachers need a more comprehensive level of education. Seattle’s Pre-K for All program requires lead teachers to hold a bachelor’s degree in ECE or a bachelor’s degree plus a teaching credential. In order to meet these standards in Seattle, the City is looking to increase the supply of bachelor’s-level prepared pre-school teachers, and has thus reached out to the Seattle Colleges to develop this program. Nationally, the Head Start program has established a goal that 50 percent of its teachers have a Bachelor’s degree, and NAEYC is implementing a new requirement by 2020 daycare centers seeking NAEYC accreditation will need to have 75% of their teachers holding a relevant bachelor’s degree.

Demand for baccalaureate-trained preschool teachers and administrators is not being met. There are only a handful of ECE and related studies programs in King County located at City University, the University of Washington-Seattle, Eastern Washington University's Bellevue Campus, and Central Washington University's Des Moines campus. But together these programs produced only nine ECE graduates in 2013 according to IPEDS data. While UW-Seattle has recently created two programs, an early childhood and family studies undergraduate major and an online degree completion program, neither is very accessible to incumbent workers enrolled in community college ECE programs, or students who do not meet the academic
standards required for UW admission. The degree completion program does not articulate to any community college ECE AAS degree, and UW is not interested in developing an articulation agreement.

Fortunately, there are a wide range of feeder programs in early childhood education that can provide a pipeline for a new ECE BAS program. There are ECE associate degree programs at North Seattle College, Bellevue, Edmonds, Everett, Green River, Highline, Lake Washington, and Olympic College. In addition, both Seattle Central and North Seattle College have implemented the stackable certificate programs that lead to the Washington ECE Certificate, and Seattle Central also has a Child and Family Studies certificate program. Together, these programs serve 1,600 students each year. Other Associate degree programs that would provide a transfer opportunity include an AA-DTA or AS degree, or other AAS degree in a social science field, such as Social and Human Services programs at Seattle Central, Highline, and Edmonds Community Colleges.

One of the biggest barriers to continued education for pre-school teachers has been the limited prospect of higher pay with a bachelor’s degree. The Pre-K for All initiative in Seattle will provide the needed incentive for incumbent workers to go ahead and make the investment in their education. The City has established a goal to raise compensation for baccalaureate-trained preschool educators to kindergarten teacher levels ($26.00/hr.), and with tuition subsidies available for participating daycare centers they will be better-able to achieve this goal without losing customers.

Seattle's childcare workers are poised to go forward. Twenty-eight percent of area childcare workers already have a sub-baccalaureate post-secondary credential and are poised to directly enter a BAS program. Many are currently in community college ECE programs. A recent poll of 170 current Seattle-area ECE students found that four out of five respondents would be interested in enrolling in an ECE BAS program if one were offered in Seattle.

The time is right in Seattle to expand the supply of baccalaureate-trained preschool teachers and administrators. The need to professionalize the occupation is clear and the capacity of current programs is inadequate to meet the demand.

1. Relationship to institutional role, mission, and program priorities

The Seattle District Vice-Presidents of Instruction, the North Seattle President’s Executive Team, the Instructional Council, the faculty-driven Curriculum and Academic Standards Committee (CAS), and the North Seattle Early Childhood Education Technical Advisory Committee all strongly support the development of the Bachelor of Applied Science Degree in Early Childhood Education (ECE). The college leadership and faculty support the program because it directly
aligns with North Seattle’s core mission and values (as well as those of the Seattle District) and is a logical step in providing students with a career pathway that will lead to employment in a growing occupation that is critical to the central Puget Sound and Washington State. This proposal is also reflective of the Seattle District which includes Seattle Central and South Seattle Colleges, as the mission, goals and priorities for the District closely mirror those of North Seattle College.

Mission: North Seattle College is committed to changing lives through education. We achieve our mission by:

- Offering comprehensive educational opportunities
- Creating a highly supportive learning environment
- Engaging in effective and enduring partnerships

The ECE degree will give students new educational opportunities beyond a certificate or Associate degree, and will help to further professionalize the occupation. The degree will support the college and the District in its continuing efforts to create partnerships with business and industry, giving organizations the opportunity to help shape the curriculum of the program, hire interns, and eventually hire qualified graduates.

Vision: North Seattle Community College is a progressive educational resource, actively engaged with its community, and known for its innovation and responsiveness.

The ECE degree is a response to the demonstrated needs of the Seattle area for trained professionals who can serve as lead teachers, supervisors, or administrators and directors at childcare and early learning facilities and programs.

Values: In promoting continuous learning and growth, we practice: Caring, Collaboration, Diversity, Innovation, Integrity, Quality.

To develop and maintain the ECE degree there has been, and will continue to be, collaboration with the childcare and early learning service providers who are an important part of the Greater Seattle economy, and with other community colleges in the Seattle area that will send students to the program. In addition, there will be articulation with graduate programs education and child studies, as well as collaboration with area high schools. These levels of articulation and coordination will combine to produce a streamlined pathway with multiple entry and exit points that will increase access, retention and completion efforts. The program will attract both high school graduates seeking a secure career in ECE, as well as existing current childcare workers. Developing this degree and its pathway options directly aligns with North’s values of collaboration and innovation, while also striving for integrity and quality which will attract an increasingly diverse student population.
Core Themes: Advancing student success, excelling in teaching and learning, building community.

The ECE BAS degree is in direct alignment with the three Core Themes of the institution:

- **Advancing Student Success** – the four-year degree will give community college students a more accessible opportunity to pursue an advanced degree with the same care and concern about student retention that current Seattle Colleges students enjoy.

- **Excelling in Teaching and Learning** – the ECE degree will build on the Seattle Colleges strong early childhood education and child and family studies programs, and give faculty the ability to develop and implement the more rigorous 300- and 400-level classes. The regular assessment of course, program and degree outcomes will take on even more importance and relevance with students and faculty as the Seattle Colleges now play the dual role of the feeder college and baccalaureate institution.

- **Building Community** – The degree requires the Seattle Colleges to continue its drive to form local partnerships because early learning providers, child welfare organizations, and other community organizations will play a key role in the creation and the delivery of the degree. Several of these organizations already serve on the ECE Technical Advisory Committee (TAC) at North Seattle and the Child and Family Studies TAC at Seattle Central.

**Essential Learning Outcomes**: Knowledge, intellectual and practical skills (including intercultural knowledge and competence), personal and social responsibility and integrative and applied learning.

The ECE degree will embody the Essential Learning Outcomes in its rigorous curriculum and supportive educational activities, with a special emphasis on real world applications and work-based learning. An added benefit of the ECE degree is that lower division students who are not enrolled in the program will see students taking classes and being successful at the junior and senior levels. Students who are the first in their families to attend college, students who are starting out in precollege classes and adult basic education, and students who think a transfer degree is something unattainable will be able to observe and interact with students who attained their Associate degree and are now taking the next step forward in their career. This is a dynamic that is important to the Board, the Executive Team and faculty of North Seattle and Seattle Central, and the rest of the Seattle District.

The Seattle Colleges are ideal institutions to promote and enroll students into the ECE degree. The district enrolls over 46,000 students annually and is second only to the University of Washington in student population in Washington State. North, Central and South Seattle are successfully leading the community college system by currently offering seven Applied
Baccalaureate programs, and with several more under development. Seattle is also a very diverse district, with the Seattle Colleges enrolling 51% students of color. This strong diversity will strengthen the ECE program as it develops, and make the program’s graduates more marketable as employees, with the same demographic profile as the young children for whom they will be providing care and instruction.

Another advantage North Seattle and the Seattle District has is the large number of international students that are on their campuses. North will enroll 1,000 international students this year; Central, 1,900; and South, 400. Having a large pool of international students adds significantly to the richness of student life and global educational opportunities on the campuses. Finally, the Seattle campuses have robust existing applied associate degree programs in business, construction trades and building science, accounting and bookkeeping, information technology and other related fields.

2. Support of the statewide strategic plan

The proposed Early Childhood Education BAS degree that North will offer clearly supports the SBCTC Mission Study. It helps answer the fourth Challenge in the study: Washington needs more people with baccalaureate and graduate degrees. Community and technical colleges must expand their contribution to baccalaureate education to meet this need, and is well-positioned to reach place-bound and lower-income students. In addition, item number four of SBCTC’s 10-point Twenty-Year Action Plan lists calls for community colleges to contribute more to the production of applied baccalaureate degrees.

The ECE degree helps meet the first Challenge of the Mission Study as well: to help more people attain higher levels of skill and knowledge as our state becomes more diverse and its corresponding item in the Twenty-Year Action Plan. The ECE degree will be more affordable to students than most other options offered in the region, and will be drawing from the much more diverse student population which the community colleges traditionally serve. The program also supports the second item in the Twenty-Year Action Plan: close the statewide skills gap for technically trained workers.

The Washington Student Achievement Council’s 2012 Strategic Action Plan, Critical Crossroads: A Call to Action identifies system capacity as a critical state challenge—noting that Washington ranks 42d of the fifty states in baccalaureate degree production. The report calls for increasing capacity because too many Washington students do not have access to post-secondary education. The report states that, “our first priority must be to find spaces for qualified Washington students, particularly in high-demand fields.” The ECE program will directly address these challenges by expanding baccalaureate capacity for Washington residents who seek lower-cost education options in a high-demand field of study.
3. Employer/community demand for graduates at the baccalaureate level of education proposed in the program

**Market-Driven Demand.** For this analysis, we are only looking at preschool teachers (SOC 25-2011) and not childcare workers (SOC 39-9010) who do not require baccalaureate-level preparation.

According to EMSI, Inc., demand for pre-K teachers in Seattle is forecast to grow 19% between now and 2024, higher than the overall job growth rate for the central Puget Sound, state and the nation. Average annual job openings for the period are forecast at 89 jobs in Seattle and 263 jobs in the Seattle MSA, but of course this does not take into account the policy-driven demand for baccalaureate-trained preschool teachers which will likely increase these numbers. Median hourly earnings are currently $13.25, however baccalaureate-trained teachers are expected to earn at rates comparable to Kindergarten teachers ($26.04/hour). The City of Seattle's *Pre-K for All* initiative has elevated the goal of raising lead teacher salaries to this salary level, and the program's subsidies will enable childcare providers to raise wages. The City's $15.00 minimum wage policy will also put upward pressure on preschool wages and tuition.

### Table 1
**Current and Forecast Demand for Pre-School Teachers in Seattle**

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<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25-2011</td>
<td>Preschool Teachers, Except Special Education</td>
<td>1,768</td>
<td>2,106</td>
<td>338</td>
<td>19%</td>
<td>893</td>
<td>89</td>
</tr>
</tbody>
</table>

Source: EMSI, Inc.

**Demand-Supply Gap.** The target occupation for the Early Childhood Education BAS program is:

**Preschool Teachers, Except Special Education (SOC 25-2011):**

*Instruct preschool-aged children in activities designed to promote social, physical, and intellectual growth needed for primary school in preschool, day care center, or other child development facility.*

In addition, a few graduates may move directly into preschool administration.

**Education Administrators, Preschool and Childcare Center/Program (SOC 11-9031):**

*Plan, direct, or coordinate the academic and nonacademic activities of preschool and childcare centers or programs.*
The following key data regarding demand for preschool teachers in Seattle are as follows:\(^1\)

- There are currently 4,040 preschool teachers in King County, about 1,800 were in Seattle. There were 116 job openings for preschool teachers in King County in 2013.
- In December 2014 there were 147 unique online job postings (de-duplicated) for preschool teachers in King County.
- The number of preschool teacher positions is expected to increase by 730 additional jobs (18\%) in the next ten years. This growth rate is three percentage points higher than the forecast regional growth rate for all occupations.
- There will be an estimated 200 job openings for preschool teachers each year for the next five years in King County. (Note that this number is a low estimate because it does not reflect the increase in demand caused by policy changes or public investments).
- Nearly half of these 200 job openings will go to teachers who have a bachelor’s degree. The breakdown of these annual job openings by education level is as follows:

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Number of Job Openings in 2020</th>
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</thead>
<tbody>
<tr>
<td>Bachelor’s Degree or higher (53%)</td>
<td>106</td>
</tr>
<tr>
<td>Associate’s Degree (9%)</td>
<td>18</td>
</tr>
<tr>
<td>Some College or Certificate (19%)</td>
<td>38</td>
</tr>
<tr>
<td>HS Diploma/GED (14%)</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
</tr>
</tbody>
</table>

Table 2
Forecast Annual Job Openings for Preschool Teachers (SOC 25-2011) in King County by Education Level in 2020


- The median hourly earners for preschool teachers in King County is $13.30 ($28,000 per year). Baccalaureate-trained teachers will likely be paid more. The distribution of earnings for the occupation is as follows:

\(^1\) All data from EMSI, Inc. Analyst labor market data system.
Supply and Gap Analysis: Seattle has only a handful of programs that provide baccalaureate-level education for preschool teachers, and none of them are focused exclusively on early childhood education. All of them are Child and Family Studies programs which support a wide range of occupations beyond preschool teachers. One exception is the City University program which is a teacher training program for pre-k through 3rd grade, so it too is not focused exclusively on preschool teachers.

Table 3
Baccalaureate-Level Early Childhood Education Related Programs and Enrollments in the Seattle Area

<table>
<thead>
<tr>
<th>Institution</th>
<th>Program Name</th>
<th>Current Enrollments</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Washington-Seattle</td>
<td>Early Childhood and Family Studies</td>
<td>299</td>
</tr>
<tr>
<td>University of Washington-Seattle</td>
<td>Early Childhood and Family Studies—Online Degree Completion</td>
<td>111</td>
</tr>
<tr>
<td>Central Washington University-Des Moines</td>
<td>Family Studies</td>
<td>25</td>
</tr>
<tr>
<td>Eastern Washington University-Bellevue</td>
<td>Children’s Studies</td>
<td>24</td>
</tr>
<tr>
<td>City University</td>
<td>Elementary Education with Early Childhood Education Emphasis</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Source: Research conducted by Sally Holloway, Director of Early Childhood Education, Whatcom Community College.

The UW baccalaureate programs are very new and there have been no completions yet. The new Early Childhood and Family Studies major field option is a multi-disciplinary program.
which, according to the program website, provides a pathway to a range of occupations including “careers in early learning, childcare, policy, parent and family support and education, and social/mental health services.” The Online Degree Completion version of this program is for students who have 70 or more college credits, but those credits must be almost entirely general education credits. Students who are already enrolled in community college ECE programs would need to start over on an Associate of Arts direct transfer agreement pathway to quality for the program. Both programs are only suitable for students with an exemplary academic record since admission standards are very selective.

The CWU and EWU programs at Highline and Bellevue Colleges are very small and like the UW program are not ECE-specific. The City University program is also small with only nine completions in 2013. It is a teacher certification program with an ECE emphasis option.

The table below shows all of the completions by level for Seattle and King County in 2013. The only baccalaureate-level completions were the nine City University degrees. The CWU and EWU satellite programs are not considered Seattle completions since they accrue to the home campus.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Award of less than 1 academic year</th>
<th>Award of at least 1 but less than 2 academic years</th>
<th>Award of at least 2 but less than 4 academic years</th>
<th>Bachelors degree</th>
<th>All Certificates</th>
<th>All Degrees</th>
<th>All Completions</th>
</tr>
</thead>
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<tr>
<td>North Seattle College</td>
<td>21</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>21</td>
<td>8</td>
<td>29</td>
</tr>
<tr>
<td>City University of Seattle</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>9</td>
<td>9</td>
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<td>Shoreline Community College</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>6</td>
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<tr>
<td>Seattle Central College</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td><strong>1</strong></td>
<td><strong>14</strong></td>
<td><strong>0</strong></td>
<td><strong>9</strong></td>
<td><strong>23</strong></td>
<td><strong>46</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Institution</th>
<th>Award of less than 1 academic year</th>
<th>Award of at least 1 but less than 2 academic years</th>
<th>Award of at least 2 but less than 4 academic years</th>
<th>Bachelors degree</th>
<th>All Certificates</th>
<th>All Degrees</th>
<th>All Completions</th>
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<tbody>
<tr>
<td>Green River Community College</td>
<td>50</td>
<td>0</td>
<td>14</td>
<td>0</td>
<td>50</td>
<td>14</td>
<td>64</td>
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<tr>
<td>Renton Technical College</td>
<td>7</td>
<td>14</td>
<td>12</td>
<td>0</td>
<td>21</td>
<td>12</td>
<td>33</td>
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<td>North Seattle College</td>
<td>21</td>
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<td>8</td>
<td>0</td>
<td>21</td>
<td>8</td>
<td>29</td>
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<tr>
<td>Bellevue College</td>
<td>12</td>
<td>6</td>
<td>8</td>
<td>0</td>
<td>18</td>
<td>8</td>
<td>26</td>
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<td>Lake Washington Institute of Technology</td>
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<td>Highline Community College</td>
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<td>City University of Seattle</td>
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<td>Shoreline Community College</td>
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<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Seattle Central College</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>109</strong></td>
<td><strong>27</strong></td>
<td><strong>60</strong></td>
<td><strong>0</strong></td>
<td><strong>136</strong></td>
<td><strong>69</strong></td>
<td><strong>205</strong></td>
</tr>
</tbody>
</table>

Source: EMSI, Inc from NCES IPEDS data, 2013.

Most of the community college’s ECE enrollments are childcare workers who have an interest in gaining state certifications or advancing to a lead teacher or administrative position. Because there hasn’t been a great deal of emphasis, until now, on higher professional standards nor the money to pay workers more for achieving them, most enrollments have been short-term certificates rather than degrees. Federal, state, and local efforts to professionalize the
occupation should lead to greater incentives for childcare workers to continue on with their education and get their AAS and then BAS degrees.

4. Applied baccalaureate program builds from existing professional and technical degree programs offered by the institution

The primary lower division feeder programs for the Property Management BAS are through the existing ECE certificate and degree programs in the area. There are ECE associate degree programs at North Seattle College, Bellevue, Edmonds, Everett, Green River, Highline, Lake Washington, and Olympic College. In addition, both Seattle Central and North Seattle College have implemented the stackable certificate programs that lead to the Washington ECE Certificate, and Seattle Central also has a Child and Family Studies certificate program. Other Associate degree programs that would provide a transfer opportunity include an AA-DTA or AS degree, or other AAS degree in a social science field, such as Social and Human Services programs at Seattle Central, Highline, and Edmonds Community Colleges.

Table 5, below shows completions from North Seattle’s ECE program for the last six years. From the numbers it is apparent that with minor fluctuations, the total number of completions has been about 30-50 completions per year, indicating that program success will be contingent upon drawing students from all of the area colleges, not just North Seattle College.

<table>
<thead>
<tr>
<th>Type of Award</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Degree</td>
<td>10</td>
<td>6</td>
<td>15</td>
<td>16</td>
<td>9</td>
<td>16</td>
<td>72</td>
</tr>
<tr>
<td>Certificate &lt;45 Credits</td>
<td>31</td>
<td>23</td>
<td>42</td>
<td>34</td>
<td>22</td>
<td>21</td>
<td>173</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>41</strong></td>
<td><strong>29</strong></td>
<td><strong>57</strong></td>
<td><strong>50</strong></td>
<td><strong>31</strong></td>
<td><strong>37</strong></td>
<td><strong>245</strong></td>
</tr>
</tbody>
</table>

If we look at all of the ECE students in the Seattle-area’s community, we see a much more impressive and stable pipeline of potential students for the BAS program. There were nearly 1,600 ECE students in 2014 within travel distance of Seattle who can be targeted for enrollment in the BAS program. Of those, nearly 200 received a certificate or degree. The establishment of the BAS will provide an additional incentive for students to complete their lower division programs and help to drive up that number.
### Table 6

**Headcount and Completions for Early Childhood Education Students are Seattle-Area Community Colleges, 2014**

<table>
<thead>
<tr>
<th>Area College</th>
<th>Headcount</th>
<th>Completions ≥ 45 credits</th>
<th>Completions &lt; 45 credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BELLEVUE</td>
<td>237</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>EDMONDS</td>
<td>162</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>EVERETT</td>
<td>138</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>GREEN RIVER</td>
<td>260</td>
<td>5</td>
<td>75</td>
</tr>
<tr>
<td>HIGHLINE</td>
<td>157</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>LAKE WASHINGTON</td>
<td>68</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>OLYMPIC</td>
<td>231</td>
<td>13</td>
<td>21</td>
</tr>
<tr>
<td>PENINSULA</td>
<td>11</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>RENTON</td>
<td>87</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>SEATTLE CENTRAL</td>
<td>34</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>SEATTLE NORTH</td>
<td>164</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>SHORELINE</td>
<td>50</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,599</strong></td>
<td><strong>114</strong></td>
<td><strong>184</strong></td>
</tr>
</tbody>
</table>

Source: SBCTC Enrollment and Completion Report

Other Associate degree programs that would provide a transfer opportunity to the BAS program include an AA-DTA or AS degree, or other AAS degree in a social science field, such as Social and Human Services programs at Seattle Central, Highline, and Edmonds Community Colleges. When these students are factored in, the pipeline for a new ECE BAS program becomes even bigger.

While developing and later implementing the ECE BAS program, administrative and curricular synergies with existing North Seattle College BAS degrees will be assessed and leveraged. Strategies to share curricular elements with the college BAS programs in Behavioral Science (at Seattle Central College) will be explored. Opportunities to leverage/share administrative resources across the three North Seattle College BAS programs is also being studied.

The new ECE BAS will include many new courses. While the majority of the curriculum at the 300 and 400 level in the Early Childhood Education content courses will be new, North will utilize already-existing transfer courses and present 100 and 200 level to fulfill the general education requirements of the degree.
5. Student Demand for a Bachelor of Applied Science Program in the Seattle Area

In winter quarter, 2015, North Seattle College surveyed students at Early Childhood Education programs across six community colleges in the Seattle area. Students were asked about their interest in the Early Childhood Education Bachelor of Applied Science (BAS) degree that would open for enrollment in winter 2016 and be located in central Seattle. There were over 170 respondents to the survey, 70% of whom were currently working in the field, and one-third of respondents had over ten-years of experience in the field and a fairly even distribution across lesser years of experience. The survey included a very brief description of the proposed program and its projected tuition costs. The following are summary highlights of the results of the survey:

- 119 respondents (80%) indicated they would be interested in enrolling in the BAS program. 34 (20%) said they would be interested in enrolling when the program opens in 2016, 72 (42%) said they would be interested in enrolling after finishing

Student Survey Comments

Student survey respondents offered comments on the proposed Early Childhood Education BAS degree.

Several students mentioned the affordability of the community college as a factor in their interest:

“It would be amazing to have a Bachelor’s program for ECE with Financial Aid possibilities near my area. I am definitely interested!”

Others mentioned an interest in a degree that will articulate to their current prof-tech program:

“I am currently working on my ATA degree in Early Childhood Education. I am interested in working towards a bachelors in the future, but I know that ATA degrees can be hard to transfer. Is it possible for me to be eligible to attend a program like this with an ATA?”

Several students commented that having an option other than UW would be appealing to them:

“I think a BAS is a great idea. It would be a good alternative to UW.”

Many students mentioned that a non-traditional program (evenings, weekend, and hybrid instruction) is a necessity:

“I have just started school last fall of 2014. I notice a lot of the Main courses for CFS are only in the day time. That is inconvenient for me to an extent. I would like to work full time at my preschool, but still be able to take all my main classes that I need...I would encourage more evening classes.”
their Associate degree, and 32 (19%) said they would be interested in enrolling someday in the future.

- 123 respondents (72%) indicated that they thought that getting an applied bachelor’s degree would benefit them through either a promotion or increased earnings.
- Two-thirds of respondents indicated weekday evening availability for taking classes, half indicated weekend availability, a third indicated morning availability, and finally a third indicated weekday availability. We will be looking at hybrid class options since many students specifically indicated interest in blended learning.

The fact that 62% of students indicated interest in the BAS program in the near future (and an additional 19% at some point down the road) is encouraging. Students were surveyed at CTCs around Seattle, and plans are to offer the program in a central location to maximize geographic accessibility.

**Industry Trends and Student Demand.** Over the past two decades, a growing body of brain science research has demonstrated that early childhood is a period of rapid brain development and learning with life-long consequences. Studies show that when children start school behind, they stay behind. City, state, and national policymakers have responded to these findings, impacting employer demand and corresponding student demand for BAS degrees.

According to Nobel Laureate and University of Chicago researcher James Heckman:

“The highest rate of return in early childhood development comes from investing as early as possible, from birth through age five, in disadvantaged families. Starting at age three or four is too little too late, as it fails to recognize that skills beget skills in a complementary and dynamic way. Efforts should focus on the first years for the greatest efficiency and effectiveness. The best investment is in quality early childhood development from birth to five for disadvantaged children and their families.” (December 2012)

**Trends at the local level:** In November 2014, Seattle voters passed Proposition 1-B, *Pre-K for All*, a pilot project making high-quality preschool available and affordable for 2,000 Seattle children. In order to meet the criteria for high-quality pre-K in the city of Seattle’s pilot program, teachers need a higher level of education. Seattle’s *Pre-K for All* program will require lead teachers to hold a bachelor’s degree in ECE or a bachelor’s degree plus a teaching credential. In order to meet these standards in Seattle, the City is looking to increase the supply of bachelor’s-level prepared pre-school teachers, and has thus urged NSC to develop this program.

**Trends at the state level:** In 2013, Washington State pledged to create over 10,000 spots in the state-funded ECEAP expansion. The program anticipates an increase in lead teacher qualifications and expects that about 215 of its incumbent Associate Degree teachers will need to earn bachelor’s degrees in order to retain their positions.
Washington State was one of just nine states to receive the federal $60 million Race to the Top (RTT) Early Learning Challenge grant for 2011-15. One of the key components of RTT is to increase high quality preschool programming through increased incentives for teacher professional development. Through the RTT grant, Washington’s Quality Rating and Improvement System (QRIS), Early Achievers, rewards child care programs for increasing standards for lead teacher credentials. While it is too soon to determine the direct influence the program will make on demand in Washington, the QRIS program has increased demand for ECE BA degrees in other states, such as Pennsylvania.

**National level impacts on Washington State:** The national Head Start program has established a goal that 50 percent of its teachers hold a bachelor’s degree. While this goal has been satisfied in Washington State, with 56% of Head Start teachers having a bachelor’s in 2014, the Washington state program had an annual turnover rate of 17% in both 2013 and 2014, making it necessary to replenish the supply of bachelor’s level teachers regularly.

Also, the National Association for the Education of Young Children (NAEYC) has established a new requirement for accreditation of early learning centers that all lead teachers have a post-secondary degree or equivalent and at least 75% of teachers have an bachelor’s degree in education or child studies. The new standard is not currently required but will be fully implemented by 2020.

**Criterion 6.A.05 for Teachers states:**

All teachers have a minimum of an associate’s degree or equivalent. At least 75% of teachers have a minimum of a baccalaureate degree or equivalent in early childhood education, child development, elementary education, or early childhood special education, and this training encompasses child development and learning of children birth through kindergarten; family and community relationships; observing, documenting, and assessing young children; teaching and learning; and professional practices and development.

**Increasing Earnings:** Given the increasing professionalization of the industry, it follows that 72% of students believe that a BAS degree would benefit them through a promotion or increased earnings. According to EMSI, Inc., current median hourly earnings for ECE teachers are $13.25, however baccalaureate-trained teachers are expected to earn at rates comparable to Kindergarten teachers ($26.04/hour) in the Seattle City Pre-K for All Program. Increased subsidization of childcare services through Pre-K for All and ECEAP makes paying lead teachers a premium for their bachelor’s degrees more feasible.

**Demand from Incumbent Workers.** Another important source for student recruitment will be workers already employed in early childhood education. Nationally, 28% of ECE teachers have a certificate or associate’s degree. As professional standards rise, it is expected that many of these incumbent workers will seek to continue their education. While many preschool teachers have a bachelor’s degree or higher, many of those degrees are not in ECE or general education.
Although related degrees have been accepted in the past, industry trends point toward increasing employer demand for degrees specific to the field.

Much time and energy will be dedicated to working with our ECE BAS advisory committee for the ECE program, as well as the ECE technical advisory committees at North and our partner colleges. The college anticipates enrolling a significant number of incumbent workers who are upgrading their skills and working to advance in the ECE industry. Our launch customer, the City of Seattle’s Department of Early Education and Learning, has been clear in the importance of a four-year degree in the jobs for which ECE program students will qualify. The degree will be built with evening and hybrid classes to better accommodate working students.

As indicated in the table below, the program will enroll twenty full-time students in its first year with an additional 24 students in year 2 as the first class moves on to their senior year.

<table>
<thead>
<tr>
<th>Year</th>
<th>2016-17</th>
<th>2017-18</th>
<th>2018-19</th>
<th>2019-20</th>
<th>2020-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTES</td>
<td>20</td>
<td>44</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

6. Efforts to maximize state resources to serve place-bound students

The Early Childhood Education BAS program will be a mix of face-to-face and hybrid instruction in order to reach as many place-bound and working students in the Seattle area as possible. With 20 percent of North Seattle College’s current student population taking on-line classes, the college has a great deal of experience in supporting hybrid and web-enhanced instruction.

The program will target students working in preschool and childcare organizations as well as students enrolled in lower division community college ECE programs. By definition these students are place-bound since they are working in the Seattle area. They will need evening and/or weekend scheduling. Access to online instructional content and reduced in-class hours will enable them to fit college into their busy schedules.

The data presented above shows that, by far, the largest early childhood baccalaureate program in Seattle is at the University of Washington. But this program is not accessible to students who do not have the academic credentials to gain admission to the UW. The online degree completion program is not accessible to students enrolled in community college ECE programs, since UW will not accept ECE course credits toward the required 70 college credits needed for admission.

North Seattle College is beginning the process of engaging with Master’s in Education providers in the Seattle area to ensure that ECE BAS program graduates who wish to pursue a Master’s in
Education can easily due so. There are many programs in the area offered by UW-Seattle and Bothell, Antioch University, City University, Seattle Pacific University, and Seattle University. The ECE BAS will be designed with these programs in mind to help facilitate further education to the Masters level. Representatives from some of these programs will serve on the program advisory committee.

North Seattle College has consulted extensively with area employers and community stakeholders in the development of this program proposal to ensure that the need for baccalaureate-trained pre-school teachers is clear and regional demand will be sustained. The message we keep hearing from our employer and community partners is clear—baccalaureate-educated lead preschool teachers are difficult to find, and current childcare workers need an opportunity to get the education required to become lead teachers.

The table below lists some of the employers and community stakeholders that were consulted regarding the ECE BAS program and the text box on page 18 shows a selection of some of their comments about the proposed program.

<table>
<thead>
<tr>
<th>Name</th>
<th>Employer</th>
<th>Job Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abby Maclean</td>
<td>Interlake Child Care and Learning Center</td>
<td>Executive Director</td>
</tr>
<tr>
<td>Alice Evans</td>
<td>Creative Montessori School</td>
<td>Director</td>
</tr>
<tr>
<td>Brianna Jackson</td>
<td>Community Day School Association</td>
<td>Executive Director</td>
</tr>
<tr>
<td>Bobbie Bender</td>
<td>Lil’ People’s World</td>
<td>Director</td>
</tr>
<tr>
<td>Dave Williams</td>
<td>Lake Forest Park Whizz Kids Academy</td>
<td>Director</td>
</tr>
<tr>
<td>Dee Fluharty</td>
<td>Greenacres</td>
<td>Executive Director</td>
</tr>
<tr>
<td>Elizabeth Benedetto</td>
<td>Morningside Residence, Inc.</td>
<td>CEO</td>
</tr>
<tr>
<td>Fran Keown</td>
<td>Kidspace Childcare Center</td>
<td>Executive Co-Director</td>
</tr>
<tr>
<td>Hilda Magano</td>
<td>El Centro de la Raza Childcare Center</td>
<td>Executive Director</td>
</tr>
<tr>
<td>Holly Miller</td>
<td>City of Seattle</td>
<td>Director</td>
</tr>
<tr>
<td>Huelling Chan</td>
<td>Chinese Information and Service Center</td>
<td>Case Manager</td>
</tr>
<tr>
<td>Jane Ronngren</td>
<td>Early Care and Learning, Boys and Girls Clubs</td>
<td>Vice President</td>
</tr>
<tr>
<td>Janine Meyers</td>
<td>Normandy Park Kinder-Care</td>
<td>School Director</td>
</tr>
<tr>
<td>Johnny Otto</td>
<td>Small Faces Child Development Ctr.</td>
<td>Executive Director</td>
</tr>
<tr>
<td>Karol Swenson</td>
<td>Neighborhood House Head Start</td>
<td>Former ECE Manager</td>
</tr>
<tr>
<td>Kathy Buholm</td>
<td>Alpha Montessori</td>
<td>Director</td>
</tr>
<tr>
<td>Katrina Brooke</td>
<td>The Shyne School</td>
<td>Director</td>
</tr>
<tr>
<td>Katrina Paradine</td>
<td>Denise Louie Education Center</td>
<td>HR Specialist</td>
</tr>
<tr>
<td>Kelly Alonzo</td>
<td>Discovery Center</td>
<td>Program Director</td>
</tr>
<tr>
<td>Nicole Siciliano</td>
<td>University of Washington Children’s Center at Radford Court</td>
<td>Interim Director</td>
</tr>
<tr>
<td>Sandria Woods-Pollard</td>
<td>Seattle Human Services Dept.</td>
<td>Director, Retired</td>
</tr>
<tr>
<td>Sarah Airhart</td>
<td>Community School of West Seattle</td>
<td>Founder/Director</td>
</tr>
<tr>
<td>Susan Tregerman</td>
<td>Hutch Kids Childcare Center</td>
<td>Executive Director</td>
</tr>
</tbody>
</table>
The early childhood education employer experts we spoke with substantiated the following conditions that support the need for the ECE BAS program:

- Demand for pre-school teachers in the area is high and will be sustained.
- Experienced pre-school teachers with a baccalaureate in ECE are very difficult to find.
- Early childhood education is getting more demanding with assessments and state efforts to establish a Quality Rating and Improvement System (QRIS), and requires a higher level of knowledge/skill, especially for lead teachers.
- Daycare centers that are seeking accreditation from the National Association for the Education of Young Children (NAEYC) must have baccalaureate-trained lead teachers by 2020. This is pushing up demand for ECE program graduates
- With no choice, employers are having to hire workers for these positions who lack the level of professional preparation they would prefer.
- Community college programs are more accessible to the childcare workers they currently employ and would refer for further education than university programs.

Holly Miller, Interim Director of the Seattle Office of Education and Early Learning provided the following comments regarding the need for a BAS in ECE at the Seattle Colleges, and how the creation of the program would align with the goals and objectives of the Pre-K for All initiative:

“The City of Seattle, with approval from Mayor Murray, Seattle City Council, and Seattle voters has approved funding for a four-year demonstration project to create a high quality preschool system within the City of Seattle. The Seattle Preschool Program, in accordance with current early childhood education research, will require teachers to hold a bachelor’s degree in Early Childhood Education, or a bachelor’s degree with a state teaching certificate (P-3 endorsement). The Seattle Preschool is committed to working with institutions of higher education in order to expand access to early childhood education programs with the goal of supporting Seattle teachers in achieving high-quality standards.

The Seattle Preschool Program will provide tuition support to contracted teachers to achieve their bachelor’s degree, or state teaching certificate, in early childhood education. Teachers who meet these high quality education standards will be paid a competitive wage, comparable with that of school-age teachers.

Throughout the City’s development process of the Seattle Preschool Program, community members routinely expressed their desire to have higher education programs “accessible” to the needs of working, adult learners. Throughout these discussions teachers often named the Seattle community college system as a place that they felt to be accessible, both in terms of location but also school culture. Specifically, teachers of color have named the community college system to be a place that felt supportive to their needs, and a place where they have found success. The Seattle Preschool Program strives to maintain and enhance the diversity of the Seattle early education workforce, and in turn is committed working with the Seattle community college system to expand access, and encourage teacher participation.”

–Holly Miller, Interim Director, Seattle Office of Education and Early Learning

Some comments from other employers and community stakeholders are summarized below.
ECE Employer Comments

Employers and industry experts offered comments on the proposed ECE BAS degree.

Janine Meyers, School Director, Kindercare Normandy Park
By 2020, all lead teachers in NAEYC accredited centers are required to have a bachelor’s degree. The Seattle area labor pool for well-qualified or even basically qualified teachers at this level is slim to none. I have had a labor shortage of well-qualified teachers in my particular center for more than a year. It is difficult to find teachers that are educated and able to meet the standards in the ECE field. A BAS degree would definitely help fill the void in the education of many candidates. The sooner we are able to point people in specific direction to help attain the education, the better.

Abby Maclean, Executive Director, Interlake Childcare and Learning Center
This is more of a necessity with the stringent changes in the minimum qualifications for NAEYC accreditation- also as a general rule to hire quality preschool teachers with this background. Many of our candidates that apply and teaching staff have BA or BS in other fields, but love the field of ECE and desire to be in this field. Many did not have the opportunity to get a degree in this field. It would be super-helpful to our teachers. Many have commented that they would apply for a program such as this. Yes, an absolute need for this ECE BAS degree program is now!

Hilda Magana, Executive Director, El Centro de la Raza Childcare Center
I have 29 teachers and only 10 with bachelor’s degrees. Many of them are ready for that next step. We plan to expand and will be hiring 15-20 more teachers. We have worked with local community colleges to have bilingual and bicultural education and it would be very helpful to have a BAS option offered at a community college so that the demographics of the area are reflected in our classrooms with bilingual and bicultural teacher preparation.

Fran Keown, Executive Co-Director, Kidspace Childcare Center
Because there are currently only two other local schools offering BA or BAS degrees in ECE it’s difficult to find qualified candidates to fill open positions. Adding a third option in the area would be a big help. With a BA or BS degree in Early Childhood Education, candidates would be able to fill F/T lead and assistant teacher positions as well as mentor teacher and executive director positons.

Brianna Jackson, Executive Director, Community Day School Association
It has been VERY DIFFICULT to find bachelors level teachers. We hire them before they have the degree and then train them and give them STARS professional development, which doesn’t fully equip them with all the skills they need to achieve high quality...the talent pool has not yet caught up with the requirement for education since there are not many programs that are offering ECE BA degrees. Also, it has been difficult to get other degrees from other countries recognized.

Nicole Siciliano, Interim Director, University of Washington Children’s Center at Radford Court
I feel it especially promising to have this degree at the community college, which traditionally has offered more affordable degrees and convenient class times for working professionals. A teacher who wants to get a degree.
Unique aspects of the program. There are many unique features of the ECE BAS program that will help ensure its success. First, this is an applied professional-technical degree focusing on a high demand profession that drives the Seattle-area economy. While the importance of theory cannot be minimized, students in the program will learn how to how to be effective teachers and solve problems in the classroom. They will learn how to work with kids who have different learning styles and teach important concepts and skills through play. Students will resolve real-world scenarios in class and through their practical exercises and internships.

Second, this degree directly addresses a critical need in the industry. The skill sets we will train and educate our students to use are those same skill sets needed in the profession, as evidenced by the labor market data and employer consultation.

Third, this degree is very affordable. Average cost of the degree over the two years will be less than comparable degrees at UW or City University. Below is the cost in tuition and fees for one academic year, with comparisons to the average yearly cost of other local ECE degree programs.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Annual Tuition</th>
<th>% of NSC Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Seattle College</td>
<td>$7,364</td>
<td>100%</td>
</tr>
<tr>
<td>EWU-Bellevue</td>
<td>$7,372</td>
<td>100%</td>
</tr>
<tr>
<td>CWU-Des Moines</td>
<td>$7,941</td>
<td>108%</td>
</tr>
<tr>
<td>University of Washington-Seattle</td>
<td>$12,383</td>
<td>168%</td>
</tr>
<tr>
<td>City University</td>
<td>$18,090</td>
<td>246%</td>
</tr>
</tbody>
</table>

Fourth, this degree is built for those with AAS and AAS-T degrees in ECE and related fields. The BAS program takes what once was a terminal degree, adds two years of junior and senior level course work so that graduates can now qualify for higher paying jobs in a field that is essential to economy of Seattle.

Fifth, the program will heavily rely on industry experts, researchers and community stakeholders for their valued involvement in developing the program and courses, to ensure that graduates are well-prepared.

Finally, the ECE BAS will seek program accreditation from NAEYC/CAEP once it is established.

Program description and learning outcomes. This new degree program would provide education and training for lead preschool teachers. The program will cover a wide range of critical knowledge and skill-building areas consistent with high quality early learning programs. It will include a practicum and capstone project to provide students with real-world experience.
The draft learning outcomes for the program include:

- Promote child development and learning by using their understanding of young children's characteristics and needs to create environments that are healthy, respectful, supportive, and challenging for children of all abilities.
- Establish or improve, an early childhood learning environment using principles selected from classes (research, ECE theories and their life experiences).
- Observe actions, language, and social behavior of young children in an Early Childhood Education classroom, assess children’s skills and behavior based on developmentally appropriate practices, and report their findings.
- Critique organization and implementation of classroom processes in an early learning setting, identify concerns evident in the classroom, and formulate solutions to address these concerns.
- Provide parent education and encourage parental participation in early learning experiences with their own, and other, children through opportunities offered at the early learning setting.
- Build and value diverse family and community relationships and support by demonstrating their understanding of the importance and complex characteristics of children's families and communities.
- Observe, document and assess young children and use systematic observations, documentation, and other effective assessment strategies in a responsible way, in partnership with families and other professionals, to positively influence children's development.
- Connect with children and families by knowing, understanding, and using positive relationships and supportive interactions as the foundation for their work with young children.
- Use developmentally effective approaches by knowing, understanding, and using a wide array of approaches, strategies, and tools to positively influence children's development and learning.
- Utilize content knowledge in early education by applying the essential concepts, inquiry tools, and academic subjects; and use resources to deepen their understanding.
- Design, implement, and evaluate relevant, challenging, and responsive curriculum that promotes comprehensive developmental and learning outcomes for young children of all cultures.
- Identify, explain, and apply appropriate guidance techniques and theories as an important classroom management tool.
- Identify, explain, and apply nutrition, health and safety practices and procedures appropriate for use when teaching young children.
- Write clearly and effectively for varied audiences and purposes.
- Use, analyze and draw inferences from numerical and symbolic modes of communication.
- Graduates will be engaged as members of the Early Childhood profession and use ethical guidelines and other professional standards related to early childhood practice.
Appendix

Student Survey Questions

North Seattle College is considering developing a new Bachelor of Applied Science (BAS) degree in early childhood education. The program would begin in winter 2016. Current plans are to have the program be delivered face-to-face on weekday evenings and/or weekends with classroom instruction located in central Seattle.

There is increasing demand for bachelor’s degree educated preschool teachers in the Seattle area. Seattle City’s new “Pre-K for All” pilot program requires all lead teachers to hold a bachelor’s degree, and Head Start now requires that a minimum of 50% of their lead teachers hold a bachelor’s degree. This follows national trends, with the federal government pushing states to make “high quality” preschool programs widely available and affordable. The City of Seattle has set a policy goal of paying these teachers on par with kindergarten teachers who currently earn a median wage of $26.04/hour.

Full-time tuition and fees would be about $8,000 per year (less if credits are transferred in, or credit for work experience is awarded). Financial aid would be available. This program is designed to build upon either an Early Childhood Education associate degree, an Associate of Arts degree or other associate degree in a related field.

1. Are you interested in enrolling in a Bachelor of Applied Science degree program in Early Childhood Education (check one)?
   - [ ] Yes, in Winter 2016
   - [ ] Yes, After I finish with my AA Degree
   - [ ] Someday
   - [ ] No (please answer question 2)

2. If you answered “no” to question 1 above, what are the main reasons (check all that apply, do not answer this question if you did not answer “no” to question 1)?
   - [ ] No time to attend additional classes
   - [ ] Lack of affordability/insufficient financial resources
   - [ ] Wage increases don’t justify time/expense of attending classes (cost-benefit calculation)
   - [ ] Other life priorities
   - [ ] Prefer online or hybrid (online combined with classroom) instruction

Other reasons (if any):
3. What is your availability for attending college classes? (Check all that apply).

☐ Morning
☐ Afternoon
☐ Weekday evening
☐ Weekend days

4. Do you believe that additional training and education, specifically an applied bachelor’s degree, would benefit you either through promotion or increased earnings (check one)?

☐ Yes
☐ No
☐ I don't know

5. Please indicate your current employment status (check one):

☐ Currently working in ECE as a lead teacher
☐ Currently working in ECE as a Director, Administrator, or Trainer
☐ Current working in ECE in another position
☐ Not currently working in the field (skip question 6)

6. If you are working in the field, please indicate the number of years (check one):

☐ Less than one year
☐ 1-2 years
☐ 2-5 years
☐ 5-10 years
☐ 10 years or more

7. Your current college and program—circle one of each:

<table>
<thead>
<tr>
<th>College (circle one)</th>
<th>Program (circle one)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bellevue College</td>
<td>Highline College</td>
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<tr>
<td>Edmonds CC</td>
<td>Lake Washington Institute of Technology</td>
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<tr>
<td>Everett CC</td>
<td>Renton Technical College</td>
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<tr>
<td>Green River CC</td>
<td>Shoreline CC</td>
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<tr>
<td>Seattle Central College</td>
<td></td>
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</tbody>
</table>

Comments or additional information (if any):
____________________________________________________________________________________
____________________________________________________________________________________

If you would like more information about the Early Childhood Education BAS degree as it develops, please provide your name and email address (optional).

Name:_____________________________________________________________________________
Email: ___________________________________________________________________________
Limited license legal technician program update

Brief description
The Limited License Legal Technician (LLLT), a landmark state Supreme Court adopted that promises to create new jobs and expand public access to legal help, has been operative at Washington’s community and technical colleges for just over one year. Four colleges, Highline College, Edmonds Community College, Tacoma Community College and Spokane Community College have been training students to become “Limited License Legal Technicians” since January, 2014. Clark College plans to start offering courses later this year.

The purpose of this item is to provide an update to the State Board, as requested, after one year of implementation. The state Supreme Court authorized the new license in 2012, making Washington the first state to endorse this exciting new profession which will revolutionize access to legal services, particularly for low-income populations.

How does this link to the System Direction, Mission Study and Policy Focus
The adoption of the Limited License Legal Technician addresses several key elements in the System Direction. The development of the Limited License Legal Technician-Family Law practice area addresses economic demand as it delivers the required training for an emerging job market and increases the number of skilled employees in an area of identified consumer need. The training, available within our existing paralegal programs, is responsive to the changing needs of business by offering accessible, high quality, and flexible programs.

The Limited License Legal Technician credential is a new employment opportunity beyond that of a paralegal. LLLTs can provide public services for a specialized practice area, providing the opportunity to advise and assist clients independent of an attorney’s supervision. LLLTs will be able to take on legal clients, open an office and set their own fees.

Background information and analysis
The Washington State Bar Association’s role is to maintain the high standards set for the legal profession and serve as the regulators of this new rule. The goal is to ensure quality implementation and uphold protection of the public. Washington is the first state with a Limited License Legal Technician rule. This rule provides Washington the opportunity to lead the nation in expanding access to affordable legal services for the people of our state. In the United States, 80 to 90 percent of low-income people with civil legal problems never received help from a lawyer. Given that goal, it is with particular honor that the Limited License Legal Technician Board approached the community and technical college system to deliver the required coursework.

In order for an individual to apply to become a Limited License Legal Technician, students must complete the following education requirements:

1. An **associate level degree** or higher;
2. **45 credit hours of core curriculum** through an ABA approved law school or an ABA approved paralegal program; and
3. **Practice area course work** with curriculum developed by an ABA approved law school;
4. **3,000 hours** of substantive law-related experience supervised by a licensed attorney.

(Attachment A: Pathway to LLLT admission)
The 45 credit hours of core curriculum requirement is met by completing the following seven community and technical college paralegal courses:

<table>
<thead>
<tr>
<th>Civil Procedure</th>
<th>Contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewing and Investigation Techniques</td>
<td>Introduction to Law and Legal Process</td>
</tr>
<tr>
<td>Law Office Procedures and Technology</td>
<td>Legal Research, Writing, and Analysis</td>
</tr>
<tr>
<td>Professional Responsibility</td>
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</table>

In January 2014 the four colleges began offering the seven required Limited License Legal Technician (LLLT) classes. Five of the seven required courses are also offered online. The colleges have collaborated to create a crosswalk of courses available at each location and established an agreement to accept courses from a co-LLLT college. The crosswalk will serve as a key access resource and expand knowledge of coursework availability.

Clark College applied for American Bar Association (ABA) approval last spring and is working toward completion. Clark, with courses already aligned to the crosswalk, will soon offer the program. Marketing has included a quarterly round table forum and discussion with the local paralegal associations which span into Oregon.

The LLLT Board is considering modifying the endorsement standards to include non-ABA programs. State Board staff is working with the LLLT Board to assist in developing a procedural process that will maintain access and academic rigor established at initiation. Once implemented, South Puget Sound and Whatcom community colleges, among others, also hope to offer coursework.

Specialty area courses are taught by the UW School of Law. The first specialty area is Family Law. The Family Law curriculum was developed by a Family Law Curriculum Workgroup composed of representatives from Gonzaga University School of Law, Seattle University School of Law and the University Of Washington School Of Law. Course work consists of 15 credits advanced and Washington-specific domestic relations subjects. There are 14 students who have completed the first cohort at UW and will likely be eligible to apply for the first exam on May 11, 2015. At least 20 students are enrolled in the second cohort, and the third class is scheduled to begin this fall. Very soon our students, at a cost less than traditional law school, will be able to assist domestic violence victims to file a restraining order or a divorcing couple to establish a parenting plan.

Similar to the coursework offered by the community and technical colleges, the School of Law coursework is designed to promote access through distance learning, recorded content, and evening scheduling. The Limited License Legal Technician Board anticipates future consideration of Landlords Tenant, Elder, and Immigration Law as additional areas of practice. The Limited License Legal Technician continues to generate national interest and was most recently featured in The Washington Post, “Highline Community College”, March 13, 2015, Robert Ambrogi Closing the justice gap.
Potential questions

- What are the opportunities for the college system and the impact to individual colleges?
- What are the anticipated future civil and legal needs for Washington state?
- What specialty area will next be developed and what is the intended timeline?
- Will the anticipated legal needs of the community be adequately met by the completers from four to six colleges?
- Is there possibility for the community and technical colleges to also offer practice area coursework (presently offered by law schools)?

Recommendation/preferred result

Board members will be provided an update and comprehensive presentation from a panel comprised of:

- Steve Crossland - chair, Limited License Legal Technician Board: The work of the Practice of Law Board, implementation of the rule, update on national interest, and progress toward inclusion of non-ABA approved schools
- Thea Jennings - program lead, Limited License Legal Technician: Program structure, what LLLTs can do, experience requirements, upcoming examination and expanding program interest.
- Layne Russell, esq.- paralegal program director, Clark College: Discuss the collaboration with the community colleges, the crosswalk, and introduce the student experience via a student panel.
  - Sherri Farr, student
  - Kathy Tucker, student
- Marie Bruin – policy associate SBCTC Workforce Education

Policy Manual Change Yes ☐ No ☒

Prepared by: Marie Bruin, policy associate, Workforce Education
360-704-4360, mbruin@sbctc.edu
Pathway to LLLT Admission

**STEP 1: COMPLETE EDUCATION**
- **A. Minimum associate level degree**
- **B. Core Education:** 45 credit hours at ABA approved program, including 7 courses with minimum credits:
  - Civil Procedure, 8
  - Contracts, 3
  - Interviewing & Investigation Techniques, 3
  - Intro to Law & Legal Process, 3
  - Law Office Procedures & Technology, 3
  - Legal Research, Writing, & Analysis, 8
  - Professional Responsibility, 3
- **C. Practice Area Education**
  - Family Law: 15 credits

**LIMITED TIME WAIVER**
Waiver of associate degree and core education, if you have:
1. Passed the NFPA PACE Exam OR NALA Certified Paralegal Exam OR NALS Professional Paralegal Exam and have active certification
2. 10 years of substantive law-related experience supervised by a licensed lawyer
Apply for waiver until December 31, 2016

**STEP 2: TAKE & PASS EXAMINATIONS**
- **Core Education exam**
- **Practice Area exam**, which includes multiple choice, essay, and practice exercise sections

**STEP 3: ESTABLISH EXPERIENCE**
- 3,000 hours of substantive law-related experience; approx. 18 months full time
- Supervised by a licensed lawyer
- Within 3 years before or after passing examination
- Provide Declaration(s) of Supervising Lawyer(s)

*Any discrepancy or conflict between the information provided here and the rules and regulations set by the Washington State Supreme Court, or the bylaws and policies of the Washington State Bar Association, is unintentional and will be resolved in favor of strict compliance with the rules, regulations, bylaws and policies.*
An innovative high school/college partnership: College Readiness Transition Courses in Washington

Brief Description

In May 2014, the Washington community and technical college system adopted a statewide agreement offering high school students the opportunity to be placed into college-level coursework based on their scores on the 11th grade Smarter Balanced Assessment. Washington was the first state to adopt such an agreement, five more have now followed. This agreement represents the system’s commitment to improving student college readiness by encouraging high school students to achieve Washington’s new K-12 State Learning Standards for English language arts and mathematics (Common Core State Standards, 2011).

As part of this agreement, SBCTC has collaborated with the Office of Superintendent for Public Instruction (OSPI) in the development of college readiness transition courses in math and English, designed for high school seniors who score below college-ready level on the 11th grade assessments.

Together, the placement agreement and transition courses will:

• Allow more high school students to avoid remediation and placement testing when they enter college.
• Improve curricular alignment between K-12 and entry-level college courses in math and English.
• Develop and sustain local college/school district partnerships and faculty/teacher collaboration.

Collaboratively designed and developed by higher education faculty, high school teachers, and curriculum specialists from multiple colleges and school districts, these Bridge to College courses are grounded in essential career and college readiness expectations as reflected by Washington’s K-12 Learning Standards for English Language Arts and Mathematics (the Common Core State Standards). SBCTC received a grant from College Spark Washington to support establishing the courses in high schools across the state over the next two years.

How does this link to the System Direction, Mission Study and Policy Focus

Reducing the level of remediation that high school students need when they enter community and technical colleges is a critical element of broader efforts to address all aspects of SBCTC’s System Direction document: meeting the demands for a skilled workforce, increasing educational attainment for state residents, and using innovative approaches to address these needs. These innovative partnerships with K-12 are helping to close the statewide skills gap, create new academic opportunities for students, and invest in faculty/staff excellence, all important aspects of SBCTC’s Mission Study.

Background information and analysis

Washington adopted the Common Core State Standards as a way to help more students achieve college- and career-ready skills they need for life beyond high school before they graduate and to help address the persistent achievement gaps for underserved and minority students. The Smarter Balanced assessment system, administered in grades 3 through 8 and 11, is aligned to the standards. Beginning in spring 2015 the results will provide a measure of student progress on those standards throughout their years in school and design interventions as necessary to help students achieve the standards. There are four score levels on the summative assessments; students who score a three or four are on target to be
college and career ready by the end of 12th grade. The new community and technical college system placement policy agreement for the Smarter Balanced assessment ensures that students who score at those levels as juniors will be placed into college-level courses and avoid remediation. The intent of the agreement is to provide students with additional incentive for achieving the college and career readiness skills as defined by the Common Core.

Remediation is also a major element in the Washington Student Achievement Council’s 2013 Roadmap Report and a focus of one of its key recommendations. Over the past decade, through the Transition Math Project and most recently the Core to College project, SBCTC, in partnership with OSPI, has addressed the issue in a variety of ways, including working with school districts to improve the college readiness of high school students before they leave high school.

Pursuing partnerships like this with K-12 to help students avoid remedial courses is a key element in the SBCTC’s strategy to address broader issues related to acceleration and student success, especially in math. This strategy will help more students achieve credentials and degrees in a timely fashion. Students who are ready for college-level courses, math in particular, immediately upon entering college are far more likely to go on to earn degrees than students who enter needing multiple pre-college classes.

At the same time, it’s estimated that some 43,000 high school juniors taking the Smarter Balanced assessment this spring will score below college-ready. These students will need to work hard to prepare for college, and they may also have to take remedial courses in college, costing them time and money. Each year over 10,000 Washington state high school graduates going directly into community and technical colleges in the state have to enroll in remedial courses.

Students scoring below college-ready as juniors are certainly able and encouraged to attend college but they are likely to need some extra help or coursework to be successful in entry college-level courses. With the math and English transition courses, students will be able to get that help in a targeted way while still in high school rather than waiting to spend the money and time on remedial courses after entering community and technical colleges. These courses will offer high-school seniors an opportunity to gain the skills they need to succeed in entry college-level courses in math and/or English. Students who earn a B or above will be considered college-ready and eligible to enroll in credit-bearing college math and English at all participating Washington higher education institutions (currently the 34 community and technical colleges).

The courses are being developed and refined by high school teachers and college faculty under the leadership of the SBCTC and OSPI; in 2014-15 they are being piloted in 37 school districts across the state. Currently 80 districts, including 125 high schools, have agreed to offer the math and/or English courses in 2015-16, with approximately 265 teachers involved teaching an estimated 7,600 students. These teachers will participate in professional learning opportunities this summer and throughout the year to support them in teaching these new courses, collaborating with area community and technical college faculty to help improve local high school/college partnerships and alignment. With the support of the $3.3 million College Spark Washington grant, the goal is to add another 100 new districts for 2016-17 so that the courses are available in close to two-thirds of school districts in the state by the end of the grant period.
Potential questions

- Where are we currently with respect to the development and pilot-testing of the high school transition courses in Washington?
- What are the plans for scaling the work to offer the courses more broadly across the state over the next few years?
- What are the implications of the transition courses for pre-college math and English programs at Washington community and technical colleges?

Recommendation/preferred result

- Provide update on current status and plans for expansion of project developing and supporting high school college readiness transition courses.
- Consider ramifications for key program challenges facing pre-college programs in Washington community and technical colleges.

Policy Manual Change

Yes ☒ No ☐

Prepared by: Bill Moore, director, K-12 Partnerships
360-704-4346, bmoore@sbctc.edu

bmoore@sbctc.edu
Student voice: DREAMer student training

Brief description
A Student Services Commission workgroup was created to review how community and technical colleges approach access for undocumented students. The work group provided a series of regional trainings to promote understanding of recent changes in state higher education laws, their impact on eligible students and to ensure a consistent implementation among colleges. These regional trainings took place in October and November 2014.

The programs for these trainings included:
- An overview of the Washington State Real Hope Act and HB 1079,
- The state financial aid model developed by the Washington Student Achievement Council,
- Data on undocumented students enrolled in community and technical colleges, and participation in the Washington Application for State Financial Aid.

DREAMer students provided a practical perspective on attending community and technical colleges and the nuances of going to college in an open access system. The DREAM act is federal legislation Development, Relief, and Education for Alien Minors.

How does this link to the System Direction, Mission Study and Policy Focus
After adopting the System Direction in 2006, the State Board formed a Student Voice Task Force to:
- Make recommendations about how to systematically include student perspectives in the board’s policy deliberations.
- Develop ways to foster student leadership development.

As a result, students have participated in several system task forces and the State Board has included student panels in their State Board meetings.

Background information and analysis
As part of the Washington State Student Services Commission, members from the Multicultural Student Services Directors Council provided best practices on how to serve the needs of DREAMer students. The mission of the Multicultural Student Services Directors Council is:
- to promote the recruitment, retention and successful completion of educational programs for students of color
- to affirm and value all differences
- to recruit, retain and graduate underserved student populations
- to educate and enrich the campus and surrounding communities
- to honor, celebrate and embrace different groups and their unique contributions to the American Mosaic
- to act as a resource for multicultural issues who address the unique needs of all students

This agenda items will allow the board to hear of the work that is being implemented within the community and technical college system. Concerning improving access for undocumented students.
Potential questions

- How do student issues and concerns impact policies of the State Board and the community and technical college system?

Recommendation/preferred result

Staff will facilitate a discussion with a student panel (attachment A) that will present student and system multicultural related priorities. Board members will have an opportunity to interact with students on their priorities and strategies.

Policy Manual Change Yes ☐ No ☒

Prepared by: Edward Esparza, policy associate, Student Services
360-704-4319, eesparza@sbtc.edu
Multicultural Student Services Directors’ Council
Students of Color Conference Presentation
Student Panel

SBCTC Study Session
May 6, 2015

Oscar Beltran
Clark College

Half way to the Summit

Oscar D Beltran Leyva is the first in his family to graduate from high school and move onto higher education. He has attended Clark College for three years this spring quarter of 2015, with a Women Studies Certificate. His goal is to attend Washington State University - Vancouver to earn a degree in Communications and Gender and Women Studies. He is currently a peer mentor in the Office of Diversity and Equity and is active in his college community. He is the President of the Queer Penguins and Allies Club along with being co-leader of the Multicultural Students Club.

Felisciana Peralta, President of MSSDC
Clark College

Felisciana Peralta serves as president of the Multicultural Student Services Directors Council for Washington. She is the Student of Color Conference co-chair and an active planning committee member since 2008. Felisciana works as the multicultural retention manager in the Office of Diversity and Equity at Clark College. Her primary role is to help students navigate the college system in order to utilize them. She works with community and student organizations to empower students to achieve leadership skills and gain cultural awareness.
Beth Willis, chair ● Shaunta Hyde, vice chair
Jim Bricker ● Elizabeth Chen ● Anne Fennessy
Wayne Martin ● Larry Brown ● Jay Reich ● Carol Landa-McVicker
Marty Brown, executive director ● Beth Gordon, executive assistant

Statutory Authority: Laws of 1967, Chapter 28B.50 Revised Code of Washington

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State Board members present
Beth Willis, Shaunta Hyde, Jim Bricker, Elizabeth Chen, Anne Fennessy, Larry Brown, Wayne Martin, Jay Reich and Carol Landa-McVicker

State Board members absent
None

Call to order and welcome
Chair Beth Willis called the meeting to order at 8 a.m., welcomed those present and asked for audience introductions.

Adoption of regular meeting agenda
Motion: Moved by Larry Brown and seconded by Shaunta Hyde that the State Board adopt its March 26, 2015, regular meeting agenda as presented.

Adoption of consent agenda (Resolutions 15-03-09 through 15-03-10)
Motion: Moved by Shaunta Hyde and seconded by Jim Bricker that the State Board adopt the consent agenda for its March 26, 2015, regular meeting as presented:
   a) Approval of State Board regular meeting minutes for February 5, 2015
   b) Resolution 15-03-09: Columbia Basin College, land acquisition and disposal in Richland
   c) Resolution 15-03-10: Clover Park Technical College, local expenditure, building demolition

Trustees’ Association report
- College Promise Coalition day on the hill
- Name change to Washington State Association of College Trustees (ACT)
- Legislative town halls
- Aspen awards
- Spring conference update

Presidents’ Association report
- Allocation subcommittee work
- ctcLink
- System bill interest
- Campus quarter wrap-up

WACTC allocation model recommendations – subcommittee update
Tom Keegan, Ed Brewster and Nick Lutes presented that in September 2014, after a nearly year-long effort, the Washington Association of Community and Technical Colleges (WACTC) completed and recommended to the State Board significant changes to the methods used to allocate state funding to the colleges. These changes include increasing the amount allocated based on the Student Achievement Initiative and using allocations to provide incentives to offer basic skills courses and high cost, priority courses and programs. The recommendation called for the new model to be implemented within the 2015-17 biennium. With one year remaining in the 2013-15 biennium, the WACTC’s
recommendation left the final “value” for a number of smaller, interrelated variables undecided until they could receive further examination. To accomplish these tasks, a subcommittee of the WACTC was charged with coming to the final recommendations necessary to implement the new allocation model.

Board members discussed the proposed final allocation model variables and policy recommendations to complete the development of the new allocation model proposed by the WACTC subcommittee.

2015-17 budget status and tuition update

Nick Lutes and Wayne Doty from the state board staff presented the latest operating and capital budget proposals for the 2015-17 biennium and their policy implications.

2015-17 operating budget request compared to governor and legislative proposals

The governor’s 2015-17 policy operating budget proposal reflects the board’s budget request in multiple ways: his request includes the board’s proposal to expand the MESA community college program; he acknowledged the importance of the system’s I-BEST request by dedicating state funds to support 400 enrollments; and finally, the inclusion of additional funding for the Basic Education for Adults program is executive recognition of the importance of this mission in the board’s 2015-17 budget request. There were multiple, unique policy items included in the community and technical college portion of the governor’s request. As the House and Senate release their budget plans, we will have a stronger understanding of which policy items are likely to survive the budget process.

Two key policy decisions included the governor’s budget – concerning tuition and employee compensation – combine to potentially create a difficult fiscal situation for our system beginning in 2016. Both policy items will maintain high profiles during the legislative portion of the budget process and are of primary importance in our efforts to influence outcomes.

The first is the governor’s policy of a zero percent tuition increase throughout the 2015-17 biennium. This policy choice finds little opposition amongst decision makers given recent double-digit increases in tuition. It does reverse the practice used prior to the Great Recession, however, of easing inflationary pressures on campuses through small tuition increases. In lieu of a tuition increase, providing an additional $22 million in state dollars would cover these inflationary costs.

The second key policy decision affecting our system is the governor’s proposal of a 3 percent across the board COLA for state employees. His plan establishes a new precedent which partially funds the impact to higher education budgets. The governor only provides enough state resources to fund 65 percent of the impact caused by the compensation policies. The resources to fund the remaining 35 percent are presumed to come from tuition revenue. As current tuition resources are dedicated to providing current levels of services and there are no proposed allowable increases to tuition, this funding policy represents a cut to the community and technical college system of approximately $28 million for the biennium.

2015-17 capital budget request compared to governor and legislative proposals

The governor’s new law proposal does not fund construction of two projects that have already been designed, nor six of the 10 new designs requested for 2015-17. If a budget is enacted for 2015-17 that does not fund construction of the projects that have already been designed, it is likely there will be no capacity for new projects in 2017-19 under our current strategies for managing the pipeline.

The Washington Association of Community and Technical Colleges continues to discuss strategies that would be appropriate given various 2015-17 funding scenarios. Once the 2015-17 capital budget is known, the State Board may want to consider changing how we manage the pipeline or reconsider their decisions about the 2017-19 selection.

The governor proposes funding five construction-phase projects at about 10 percent below the requested level; this would require some redesign to reduce their scope or local funding dollars to proceed.
Legislative report
The State Board was briefed on the status of the 2015 legislative session including priority legislation and progress toward reaching key priorities for the community and technical college system as outlined in the 2015 Session Advocacy Plan.

The board will also be briefed on congressional action as it relates to the community and technical college system’s 2015 federal legislative priorities.

Chair’s report
- Meeting with the governor
- Executive director evaluation process

Appointment of nominating committee for 2015-16 state board chair and vice chair
State Board Chair, Beth Willis appointed Larry Brown to chair the nominating committee. Anne Fennessy and Wayne Martin agreed to serve as members of the committee. Election of the State Board officers will be held per the State Board by-laws at the June meeting.

Math acceleration and student success strategic plan
State Board members Wayne Martin, taskforce chair, and Elizabeth Chen, taskforce vice chair, and state board staff Jan Yoshiwara and Bill Moore presented that in May 2014 the board approved a proposal for developing a strategic plan for math acceleration and success in the community and technical college system. The board charged staff to assemble and convene a system task force to develop a plan that builds on the college and system level work done to date, provides recommendations for supporting the work at scale across the system, and identifies metrics to measuring and evaluating progress. Through a series of meetings beginning in August 2014 the task force defined a set of principles and recommended actions that have now been reviewed and endorsed by key system groups and WACTC. The board will be asked to take action and approve the plan at the May 2015 meeting.

Bellevue College report
Bellevue College president, David Rule, and Bellevue College Board of Trustees chair, Steve Miller, reported to the State Board on their discussions with Washington State University regarding more Baccalaureate degrees in their area.

Adjournment/next meeting
There being no further business, the State Board adjourned its regular meeting of March 26, 2015, at 11:05 a.m. The State Board will hold next meeting May 6-7, 2015, at SBCTC Olympia.

Attest:
Shaunta Hyde
Chair pro tempore

Marty Brown
Secretary
Approval of 2015-16 state board meeting dates and locations

**Brief Description**
The State Board adopts a schedule of regular meetings each fiscal year for publication in the Washington State Register. Meetings are held approximately seven times per year on community and technical college campuses and at the State Board offices at intervals of six to eight weeks. Locations rotate among all 34 colleges, balancing visits on the east and west sides of the state. During legislative sessions, meetings are held in or near Olympia. The State Board holds its annual retreat in September.

**How does this link to the System Direction, Mission Study and Policy Focus**
The two-day meetings include a study session on the first day designed to provide board members with an in-depth discussion about policy issues and a regular business meeting on the second day when action items are addressed. The proposed meeting schedule is designed to align properly with the Board’s policy and budget decision-making process.

**Background information and analysis**
The following schedule of State Board regular meetings is proposed for 2015-16:

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 14-16, 2015 (retreat)</td>
<td>Sun Mountain Lodge, Winthrop</td>
</tr>
<tr>
<td>October 28-29, 2015</td>
<td>Seattle Central College, Seattle</td>
</tr>
<tr>
<td>December 2-3, 2015</td>
<td>Highline College, Des Moines</td>
</tr>
<tr>
<td>February 3-4, 2016</td>
<td>State Board Office, Olympia</td>
</tr>
<tr>
<td>March 23-24, 2016</td>
<td>State Board Office, Olympia</td>
</tr>
<tr>
<td>May 4-5, 2016</td>
<td>Skagit Valley College, Mount Vernon</td>
</tr>
<tr>
<td>June 22-23, 2016</td>
<td>Wenatchee Valley College, Wenatchee</td>
</tr>
</tbody>
</table>

**Recommendation/preferred result**
It is recommended that the State Board adopt Resolution 15-05-11 approving its schedule of meeting dates and locations for 2015-16 for publication in the *Washington State Register*.

Policy Manual change Yes ☐ No ☒

Prepared by: Beth Gordon, executive assistant, 360-704-4309, bgordon@sbctc.edu
A resolution relating to the 2015-16 State Board meeting schedule.

**WHEREAS** the State Board adopts its meeting schedule for the fiscal year for publication in the *Washington State Register*;

**THEREFORE BE IT RESOLVED,** that the State Board for Community and Technical Colleges has agreed upon the following meeting dates and locations for 2015-16:

- **September 14-16, 2015** (retreat) Sun Mountain Lodge, Winthrop
- **October 28-29, 2015** Seattle Central College, Seattle
- **December 2-3, 2015** Highline College, Des Moines
- **February 3-4, 2016** State Board Office, Olympia
- **March 23-24, 2016** State Board Office, Olympia
- **May 4-5, 2016** Skagit Valley College, Mount Vernon
- **June 22-23, 2016** Wenatchee Valley College, Wenatchee

**BE IT FURTHER RESOLVED,** that the State Board for Community and Technical Colleges authorizes the Executive Director to make adjustments to this action, including any necessary changes to the State Board’s Policy Manual, as necessary, for actions taken by the Governor, Legislature, data corrections, externally imposed restrictions or guidelines, uniform accounting and reporting requirements, and unanticipated changes in state or federal law.

**APPROVED AND ADOPTED** on May 7, 2015.

**ATTEST:**

_______________________________  ________________________________
Marty Brown, secretary              Shaunta Hyde, chair pro tempore
Inter-Agency Agreement:
College Readiness Transition Courses Project

Brief description
In May 2014, the Washington community and technical college system adopted a statewide agreement offering high school students the opportunity to be placed into college-level coursework based on their scores on the 11th grade Smarter Balanced Assessment. This agreement represents the system’s commitment to improving student college readiness by encouraging high school students to achieve Washington’s new K-12 State Learning Standards for English language arts and mathematics (Common Core State Standards, 2011).

As part of this agreement, SBCTC has collaborated with the Office of Superintendent for Public Instruction (OSPI) in the development of college readiness transition courses in math and English, designed for high school seniors who score below college-ready level on the 11th grade assessments.

To implement these high school courses at high schools across the state in 2015-16, an inter-agency agreement with OSPI is needed to provide direct support to participating school districts.

How does this link to the System Direction, Mission Study and Policy Focus
Reducing the level of remediation that high school students need when they enter community and technical colleges is a critical element of broader efforts to address all aspects of SBCTC’s System Direction document: meeting the demands for a skilled workforce, increasing educational attainment for state residents, and using innovative approaches to address these needs. This partnership with the Office of Superintendent for Public Instruction will help to close the statewide skills gap, create new academic opportunities for students, and invest in faculty/staff excellence, all important aspects of SBCTC’s Mission Study.

Background information and analysis
Pursuing partnerships with K-12 to help students avoid remedial courses completely is a key element in SBCTC’s strategy to address broader issues related to acceleration and student success, especially in math. This strategy will help more students achieve credentials and degrees in a timely fashion. Students who are ready for college-level courses, math in particular, immediately upon entering college are far more likely to go on to earn degrees than students who enter needing multiple pre-college classes.

The goal for these transition courses is to help the over 10,000 Washington state high school graduates who are currently enrolling directly into community and technical colleges and taking remedial courses, get the support and skills they need to avoid those courses completely while still in high school.

The courses are being developed and refined by high school teachers and college faculty under the leadership of SBCTC and OSPI; in 2014-15 they are being piloted in 37 school districts across the state. Currently 80 districts, including 125 high schools, have agreed to offer the math and/or English courses in 2015-16, with approximately 265 teachers involved teaching an estimated 7,600 students. These teachers will participate in professional learning opportunities this summer and throughout the year to support them in teaching these new courses, and foster collaboration with area community and technical college faculty to help improve local high school/college partnerships and alignment. With the support
of the $3.3 million College Spark Washington grant, the goal is to add another about 100 new districts for 2016-17 so that the courses are available in close to two-thirds of districts in the state by the end of the grant period.

**Potential questions**

- How will the grant and inter-agency agreement support districts and teachers in offering high-quality courses that prepare students for success in entry-level college English and math classes?
- What is the role of SBCTC staff in providing oversight and leadership for the implementation of the courses, and how are college faculty involved in the work?

**Recommendation/preferred result**

Staff recommends approval of Resolution 15-05-12, approving an inter-agency agreement with the Office of Superintendent for Public Instruction in the amount of $750,000 to provide implementation grants to K-12 school districts.

Policy Manual Change Yes ☒ No ☐

Prepared by: Bill Moore, director, K-12 Partnerships  
360-704-4346, bmoore@sbctc.edu
State of Washington  
State Board for Community and Technical Colleges  
Resolution 15-05-12

A resolution relating to the partnership with the Office of Superintendent of Public Instruction for the college readiness transition courses project

WHEREAS, Washington students, their families and the state would save money and time by having students be college-ready before graduating from high school; and

WHEREAS, there is a need for a higher education/K-12 partnership to create senior-year pathways to college readiness in math and English for students who need them; and

WHEREAS, the State Board for Community and Technical Colleges has been awarded a $3.3 million grant from College Spark Washington to lead the work on courses to address this need; and

WHEREAS, to support teachers in their professional learning and implement these courses successfully the Office of Superintendent of Public Instruction needs to provide resources directly to school districts;

THEREFORE BE IT RESOLVED, that the State Board for Community and Technical Colleges approve an inter-agency agreement with the Office of Superintendent of Public Instruction to support the implementation of college readiness transition courses in Washington.

BE IT FURTHER RESOLVED, that the State Board for Community and Technical Colleges authorizes the executive director to make adjustments to this action, including any necessary changes to the State Board’s Policy Manual, as necessary, for actions taken by the governor, Legislature, data corrections, externally imposed restrictions or guidelines, uniform accounting and reporting requirements, and unanticipated changes in state or federal law.

APPROVED AND ADOPTED on May 7, 2015.

ATTEST:

_______________________________  ______________________________
Marty Brown, secretary          Shaunta Hyde, chair pro tempore
Bellevue College, property acquisition, 2445 145th Place SE

**Brief description**
Bellevue College seeks to purchase the house and property at 2445 145th Place SE in Bellevue, Wash., to be used for the college’s expansion.

**How does this link to the system direction, mission study and policy focus**
This acquisition and future use will improve student access to education.

**Background information and analysis**
The subdivision the property is part of consists of 42 houses, including 16 houses that the college already owns. Over the years, the college has capitalized these properties as part of their master plan for facility expansion. The college was approached by the owner of the property at 2445 145th Place SE with an offer to sell their property to the college, which is adjacent to others that the college owns. Ultimately, the college will use the property to establish a base for student housing or another campus priority. In the interim, the house may be utilized for campus needs such as storage or interim offices.

The property cost of $588,000 will be paid for using local funds. The Bellevue College Board of Trustees approved capitalizing these properties as part of their master plan. A map of the proposed acquisition is included in Attachment A.

**Potential questions**
Is the acquisition consistent with the State Board's goal of finding more and better ways to reduce barriers and expand opportunities so more Washingtonians can reach higher levels of education?

**Recommendation/preferred result**
Staff recommends approval of Resolution 15-05-13, giving Bellevue College authority to purchase the house and property at 2445 145th Place SE in Bellevue, Wash., to be used for the college’s expansion.

Policy Manual Change Yes ☐ No ☒

Prepared by: Wayne Doty, capital budget director
360-704-4382, wdoty@sbctc.edu
State of Washington  
State Board for Community and Technical Colleges  
Resolution 15-05-13  

A resolution relating to Bellevue College’s request to purchase the house and property at 2445 145th Place SE in Bellevue, Wash., to be used for the college’s expansion.

WHEREAS, the college is requesting to use $588,000 in local funds to purchase the property; and

WHEREAS, the property is part of a subdivision which the college already owns property in and which is part of the college’s master plan; and

WHEREAS, the college will ultimately use the property to establish a base for student housing or other campus priority and, in the interim, the house may be utilized for other campus needs such as storage or interim offices;

THEREFORE BE IT RESOLVED, that the State Board for Community and Technical Colleges authorizes Bellevue College authority to use up to $588,000 in local funds to purchase the house and property at 2445 145th Place SE in Bellevue, Wash., to be used for the college’s expansion.

BE IT FURTHER RESOLVED, that the State Board for Community and Technical Colleges authorizes the executive director to make adjustments to this action, including any necessary changes to the State Board’s policy manual, as necessary, for actions taken by the governor, Legislature, data corrections, externally imposed restrictions or guidelines, uniform accounting and reporting requirements, and unanticipated changes in state or federal law.

APPROVED AND ADOPTED on May 7, 2015.

ATTEST:

_______________________________  
Marty Brown, secretary

_______________________________  
Shaunta Hyde, chair pro tempore
Proposed Acquisition
2445 145th Place SE
Parcel 1024059058
Olympic College, property acquisition, 1306 13th St.

Brief description
Olympic College seeks to purchase 0.2 acres at 1306 13th Street in Bremerton, Wash., to be used for parking.

How does this link to the System Direction, Mission Study, and Policy Focus
This acquisition and subsequent parking will improve student access to education.

Background information and analysis
Construction of Olympic College’s College Instruction Center, currently planned for the 2015-17 biennium, will displace 300 parking spaces. The current owner of 1306 13th St. approached the college about acquiring the property, which will allow the college to build a new parking lot to help offset the spaces lost. This will also reduce on street parking in the surrounding neighborhoods, helping maintain positive relationships with the college’s neighbors. The college’s board of trustees approved the purchase during their February 2015 meeting.

The acquisition cost of $130,000 will be paid using local funds. A map of the proposed acquisition is included in Attachment A.

Potential questions
Is the acquisition consistent with the State Board's goal of finding more and better ways to reduce barriers and expand opportunities so more Washingtonians can reach higher levels of education?

Recommendation/preferred result
Staff recommends approval of Resolution 15-05-14, giving Olympic College authority to purchase 0.2 acres at 1306 13th St. in Bremerton, Wash., to be used for parking.

Policy Manual Change Yes ☐ No ☒

Prepared by: Wayne Doty, capital budget director  
360-704-4382, wdoty@sbctc.edu
State of Washington
State Board for Community and Technical Colleges
Resolution 15-05-14

A resolution relating to Olympic College’s request to purchase 0.2 acres at 1306 13th St. in Bremerton, Wash., to be used for parking.

WHEREAS, the college is requesting to use $130,000 in local funds to purchase the property; and

WHEREAS, construction of the College Instruction Center, currently planned for the 2015-17 biennium, will displace 300 parking spaces and the current owner of 1306 13th St. approached the college about acquiring the property, which will allow the college to build a new parking lot to help offset the spaces lost; and

WHEREAS, the college’s board of trustees approved the purchase during their February 2015 meeting;

THEREFORE BE IT RESOLVED, that the State Board for Community and Technical Colleges authorizes Olympic College authority to use up to $130,000 in local funds to purchase 0.2 acres at 1306 13th St. in Bremerton, Wash., to be used for parking.

BE IT FURTHER RESOLVED, that the State Board for Community and Technical Colleges authorizes the executive director to make adjustments to this action, including any necessary changes to the State Board’s policy manual, as necessary, for actions taken by the governor, Legislature, data corrections, externally imposed restrictions or guidelines, uniform accounting and reporting requirements, and unanticipated changes in state or federal law.

APPROVED AND ADOPTED on May 7, 2015.

ATTEST:

_______________________________  _______________________________
Marty Brown, secretary           Shaunta Hyde, chair pro tempore
Olympic College
Existing Campus and Proposed Acquisition

Proposed Acquisition:
1306 13th Street in Bremerton
Parcel Number 3797-005-007-0102
Wenatchee Valley College, local expenditure authority, energy savings project

Brief description
Wenatchee Valley College seeks authority to spend up to $171,000 in Public Utility District (PUD) incentives along with a $350,000 Department of Commerce grant for energy efficiencies, combined with $510,000 in previously allocated state and local funds for a $1,031,000 energy savings project.

How does this link to the system direction, mission study, and policy focus
This expenditure will use technology, collaboration and innovation to meet the demands of the economy and improve student success.

Background information and analysis
The college is seeking authority to spend up to $521,000 in additional local funds, including PUD incentives and a Department of Commerce grant for energy efficiencies, to make facilities changes. The project will result in more efficient energy use and longer life for major HVAC equipment, help reduce greenhouse gas emissions, and provide more consistent temperatures for learners. The Wenatchee Valley College Board of Trustees approved the proposal and grant application at their September 2014 meeting and reviewed the related improvements and funding plan at their February 2015 meeting.

Potential questions
Is the expenditure consistent with the State Board's goal of finding more and better ways to reduce barriers and expand opportunities so more Washingtonians can reach higher levels of education?

Recommendation/preferred result
Staff recommends approval of Resolution 15-05-15, giving Wenatchee Valley College authority to spend up to $521,000 in additional local funds, including PUD incentives and a Department of Commerce grant for energy efficiencies, to improve the efficiency of their facilities.

Policy Manual Change Yes ☐ No ☒

Prepared by: Wayne Doty, capital budget director
360-704-4382, wdoty@sbctc.edu
State of Washington
State Board for Community and Technical Colleges
Resolution 15-05-15

A resolution relating to Wenatchee Valley College’s request to spend up to $521,000 additional local funds including $171,000 in Public Utility District (PUD) incentives and a $350,000 Department of Commerce grant for energy efficiencies combined with $510,000 in previously allocated state and local capital funds for a $1,031,000 energy savings project.

WHEREAS, the college is seeking authority to spend up to $521,000 in additional local funds, including PUD incentives and a Department of Commerce grant for energy efficiencies, to make facilities changes that will result in more efficient energy use and longer life for major HVAC equipment, help reduce greenhouse gas emissions, and provide more consistent temperatures for learners;

THEREFORE BE IT RESOLVED, that the State Board for Community and Technical Colleges authorizes Wenatchee Valley College authority to spend up to $521,000 in additional local funds, including PUD incentives and a Department of Commerce grant for energy efficiencies, to improve the efficiency of their facilities.

BE IT FURTHER RESOLVED, that the State Board for Community and Technical Colleges authorizes the executive director to make adjustments to this action, including any necessary changes to the State Board’s policy manual, as necessary, for actions taken by the governor, Legislature, data corrections, externally imposed restrictions or guidelines, uniform accounting and reporting requirements, and unanticipated changes in state or federal law.

APPROVED AND ADOPTED on May 7, 2015.

ATTEST:

_______________________________  _______________________________
Marty Brown, secretary          Shaunta Hyde, chair pro tempore
2016 allocation review

Brief description
The outcome of the 2015-17 biennial budget remains unknown with the Legislature now in special session. Depending on the timing of the final budget, the State Board is expected to adopt initial operating budget allocations, as well as tuition and fee schedules, for fiscal year 2016 in June 2015. At the May 2015 meeting, staff will provide context and information relevant to those upcoming decisions. The State Board will be asked to provide direction to staff on fiscal year 2016 allocations and on tuition policy for resident and non-resident students (see Attachment A – Budget allocation and tuition schedule decision points).

How does this link to the System Direction, Mission Study and Policy Focus
The ability of the system to meet the principles and goals identified in the System Direction and Mission Study are directly impacted by the outcomes of the biennial budget process, beginning with the board’s biennial budget request. Once budgets are enacted by the Legislature, the board’s allocation of state appropriations is an opportunity for linking the System Direction with annual operating allocations.

Background information and analysis

Allocations

2016 allocation adjustments
The State Board will approve fiscal year 2016 funding allocations to the colleges after the enactment of the 2015-17 operating budget. The system chancellors and presidents, through the Washington Association of Community and Technical Colleges (WACTC) Board of Presidents, have adopted allocation recommendations related to potential budget changes contained in legislative proposals for the board’s review. Attachment A – Budget allocation and tuition schedule decision points contains a list of allocation decision points considered thus far.

Earmarks and provisos
Within the allocations to individual colleges, the State Board identifies certain activities and programs that hold statewide significance or hold policy significance for the community and technical college system. The proposed earmarks for fiscal year 2016 are listed in Attachment B – Proposed FY 2016 earmarks and legislative provisos. The chancellors and presidents have reviewed the recommended list. Also included is a listing of provisos that are that currently being included by the legislative proposals for the 2015-17 budget.

Tuition schedules

Full-time resident
Neither the House nor Senate authorizes tuition increases for resident undergraduate tuition (see Attachment C – 2014-15 community and technical college undergraduate tuition and fees). Final tuition recommendations will be linked to the tuition policy included in the enacted budget.
Non-resident tuition
The State Board’s authority for setting tuition for non-residents resides in RCW 28B.15.067, which states the board “...may reduce or increase full-tuition fees for all students other than resident undergraduates, including nonresident students.” Full-time non-resident students currently pay $9,235 in tuition per year, more than twice as much as resident students. The system currently enrolls more than 9,000 non-resident and International Contract students (who also pay at the non-resident tuition rate). Since 2004, when authorized to increase resident tuition, the State Board increased nonresident tuition rates by the same dollar amount, rather than the same percentage, as resident tuition.

If increased 3 percent, annual non-resident tuition for a full-time student would increase from the current $9,235 to $9,512, an increase of $277. A change of this proportion would increase system operating revenues by approximately 0.2 percent. Final recommendations will be linked to the tuition policy included in the enacted budget.

Applied baccalaureate tuition
Neither the House nor the Senate provides authority to increase undergraduate resident tuition for the Applied Baccalaureate courses (upper-division).

Enrollment rules
The Legislature assigns enrollment targets for the community and technical college system through the operating budget. Typically, the budget act contains a total enrollment target and an enrollment target for the Worker Retraining program. Targets for enrollment growth in specific mission or program areas may also be called out in the budget act or assigned through published budget notes when new enrollment funding is provided.

The State Board seeks to ensure that legislative targets are met and that scarce resources are deployed where needed most by: (a) allocating enrollments and associated funding to the districts; (b) adopting rules specifying the conditions under which a district is eligible to receive additional growth enrollments; and (c) adopting rules specifying the conditions under which a district’s allocated enrollments and associated funding will be reduced.

Fiscal year 2016 represents a transition year between allocation models. As the method for distributing state appropriations changes, the enrollment rules used by the system will change. For the coming fiscal year, the rules reflect the transition from old enrollment parameters to those that will be in place with the new model.

At their meetings in April and May 2015, the WACTC Board of Presidents examined the existing enrollment rules and the allocation transition issues and recommended system wide rules for board review as shown in Attachment D – Proposed 2016 enrollment rules. Briefly stated, the recommended rules are:

- All allocated state enrollments: Districts must maintain 100 percent of their allocated enrollment targets in order to qualify for enrollment target increases in the following year (if provided for in the budget).
• Fiscal year 2016 is a transition year for purposes of enrollment accountability, due the planned implementation of a new allocation methodology in fiscal year 2017.

• Begin the link to the new allocation methodologies by outlining the process for establishing the target for fiscal year 2016 and how the new methodology will compile future enrollment targets.

• Worker Retraining enrollments: Districts that fall below 100 percent of their target the past two years in a row will lose a portion of their Worker Retraining funding and allocated enrollments next year. Districts that fail to meet 100 percent of their annual total allocation (i.e., all enrollments) will be ineligible to receive an increase in Worker Retraining enrollments.

• Earmarked enrollments: Districts that do not meet enrollment targets for earmarked enrollments may be subject to a reduction in funding and allocated enrollments. Earmarked enrollments are those associated with funding that has been set aside by the State Board for specific programs. In fiscal year 2016 they include aerospace apprenticeships, Hospital Employee Education and Training, university contracts, and the applied baccalaureate programs.

• Monitored enrollments: Districts are expected to maintain strong commitments to the following types of enrollments: Basic education for adults, apprenticeships and I-BEST.

Innovation account funding
Authorized in 2011 by the Legislature, the State Board can dedicate up to 3 percent of operating fee revenues (a portion of tuition) to the community and technical college Innovation Account. Funds in the account are to be used to implement the State Board’s strategic technology plan. Funding for etcLink, the replacement for our legacy administrative systems, comes from the Innovation Account.

To provide sufficient revenue for the Innovation Account to cover 2016 expenditure projections, 3 percent of operating fee collections is recommended for dedication to the account.

Potential questions
• Should non-resident tuition be increased in fiscal year 2016?
• Do the enrollment rules effectively anticipate the changing allocation methodology?

Recommendation/preferred result
The State Board will provide direction to staff concerning the fiscal year 2016 state allocation.

Policy Manual change: Yes ☐ No ☒

Prepared by: Nick Lutes, operating budget director, 360-704-1023, nlutes@sbctc.edu
## FY 2016 budget allocation and tuition decision points

### Operating Budget Allocation Methodologies

<table>
<thead>
<tr>
<th>Student Achievement Initiative</th>
<th>$4.7 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Governor's 2015-17 budget proposal does not increase investment levels for the Student Achievement Initiative beyond the current $5.25 million annual appropriation. Of the current annual amount, $4.7 million is held for reallocation each year and is distributed to colleges based on their share of points in three categories: Total SAI Points generated (45%); Total Completions Points generated (10%); and SAI Points per Student (45%).</td>
<td></td>
</tr>
<tr>
<td><strong>Recommendation:</strong></td>
<td></td>
</tr>
<tr>
<td>▪ Student Achievement Initiative – Maintain current annual investment in SAI variable allocation of $4.7 million for allocation in Fall of 2015 (after analysis of Academic Year 2015 SAI data).</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Support Services - Under-Represented STEM Students (MESA Expansion)</th>
<th>$1.0 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Governor's 2015-17 budget proposal contains funding for our request to expanded the MESA pilot project, which is currently located at Columbia Basin, Edmonds, Highline, Olympic, Seattle Central and Yakima Valley Community Colleges. The program provides support services to traditionally underrepresented students in STEM degree programs.</td>
<td></td>
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<tr>
<td><strong>Recommendation:</strong></td>
<td></td>
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<tr>
<td>▪ Work with the MESA program to determine the criteria required to qualify for the expansion.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Transfer University Center of North Puget Sound to Washington State Univ.</th>
<th>-$1.989 m</th>
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<tbody>
<tr>
<td>In the 2011 legislative session, Second Substitute Bill 5636 set up a process for transferring resources and enrollments related to the University Center from the CTC system to Washington State University. The 2014 supplemental budget transferred CTC system legislative enrollment targets related to the system (310 FTEs) to Washington State. The 2015-17 budget proposals shift funding for the FTEs beginning in 2016. <strong>This is seen in all budget proposals.</strong></td>
<td></td>
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<tr>
<td><strong>Recommendation:</strong></td>
<td></td>
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<tr>
<td>▪ Remove allocation from the SBCTC Program Budget.</td>
<td></td>
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</tbody>
</table>
### Employee Cost of Living Adjustments

$13.4 million – $23.5 million

The Governor and House 2015-17 proposed budgets fund all collective bargaining agreements, as well as provides COLAs for non-represented employees. For the CTC system, the impact is a 3.0% salary increase beginning in FY 2016. The Senate does not fund the collective bargaining agreements; funds I-732 (1.8% increase in 2016) and funds a $1000 lump sum increase for all other employees in FY 2016.

- The Governor ($15.5 million) provides 65% of the funding required to cover the policy increases.
- The House ($23.5 million) provides state funding for 100% of the policy increase.
- The Senate ($13.4 million) provides 85% of the funding required to cover the policy increase.

**Recommendation:**


### Maintenance and Operations & Leases and Assessments

$974,000

The Governor, House and Senate 2015-17 biennial budget proposals include additional appropriations in FY 2016 for Maintenance and Operation costs, to reflect the schedule completions of college capital projects. Further, it includes additional appropriations in FY 2016 for changes in campus leases and various local assessments. The budget adjustment is based on information reported by districts during the summer of 2014.

**Recommendation:**

- M&O – Allocate to **Future Allocations**; allocate to colleges when new facilities receive “occupancy permits.”
- Leases and Assessments – Allocate to **Districts** based on the leases and assessment survey completed in the summer of 2014.

### Employer Health Insurance Contributions

$30.0 – 33.0 million

The 2015 allocation will distribute the net impact of budget adjustments made for **Employer Health Insurance Contributions** increase. The Senate and House have different assumptions for FY 2016 and the Senate hasn’t revealed their policy level impacts as of this printing.

**Recommendation:**

- Allocate the net adjustment for all changes based on pro-rata share of FY 2014 state and tuition supported health benefit expenditures.

### Students of Color

$1 million

The value per district for this earmark has not been adjusted since FY 2007.

**Recommendation:**

- Allocate Students of Color earmark funds based on each district’s recalculated pro-rata share of FY 2013 and FY 2014 average head count for Students of Color.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Amount</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disability Accommodations</td>
<td>$1.17 million</td>
<td>Allocate Disability Accommodations earmark funds based on each district’s</td>
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<tr>
<td></td>
<td></td>
<td>recalculated pro-rata share of FY 2013 and FY 2014 average head count for</td>
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<tr>
<td></td>
<td></td>
<td>students with disabilities.</td>
</tr>
<tr>
<td>Supplemental Retiree Payments</td>
<td>$145,000</td>
<td>Allocate the anticipated increase in Supplemental Retiree Payments ($145,000) to</td>
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<tr>
<td></td>
<td></td>
<td>each district based on their share of FY 2014 expenditures in the SBCTC’s</td>
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<td></td>
<td>Higher Ed Retirement Plan.</td>
</tr>
</tbody>
</table>

**Tuition**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Amount</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition – Resident Undergraduate (Upper</td>
<td></td>
<td>There have been no proposals to increase tuition for 2016. The upper division</td>
</tr>
<tr>
<td>and Lower)</td>
<td></td>
<td>tuition policy in the Senate is currently unclear, as statute requires our</td>
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<td></td>
<td>Applied Baccalaureate tuition levels not exceed the regional colleges, which</td>
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<td>are targeted for decreases in 2016.</td>
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<tr>
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<td></td>
<td><strong>Recommendation:</strong></td>
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<td>• TBD</td>
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<tr>
<th>Topic</th>
<th>Amount</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition – Non-Resident Undergraduate</td>
<td></td>
<td>The 2015-17 biennial budget proposal pivots from previous policy documents.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Using a recent AG opinion on the topic, OFM and the Senate assume that all</td>
</tr>
<tr>
<td></td>
<td></td>
<td>delegated authority to adjust fees (including non-resident undergraduate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>tuition) provided in past legislatures remains valid, regardless of new</td>
</tr>
<tr>
<td></td>
<td></td>
<td>revenue approval initiatives. Assuming authority to increase tuition exists, an</td>
</tr>
<tr>
<td></td>
<td></td>
<td>increase in non-resident tuition may be prudent. The House provides authority</td>
</tr>
<tr>
<td></td>
<td></td>
<td>to increase the tuition for non-residents.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Recommendation:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Evaluate the impact of increasing tuition and the anticipated impact to the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>system.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Topic</th>
<th>Amount</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation Account Funding – Percent of</td>
<td></td>
<td>Maintain the current rate of three percent.</td>
</tr>
<tr>
<td>Tuition Dedicated to Innovation Account</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## FY 2016 State Board Earmarks and Provisos

<table>
<thead>
<tr>
<th>Earmark</th>
<th>FY 2015 Earmark</th>
<th>FY 2016 Earmark</th>
<th>FTE?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Apprenticeships</td>
<td>$2,720,407</td>
<td>$2,720,407</td>
<td></td>
</tr>
<tr>
<td>Aerospace Training</td>
<td>$1,515,400</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Alternative Financed Projects - Debt Service</td>
<td>$8,390,176</td>
<td>$8,390,176</td>
<td></td>
</tr>
<tr>
<td>Applied Baccalaureates</td>
<td>$1,599,599</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Basic Skills Enhancement</td>
<td>$3,469,574</td>
<td>$3,469,574</td>
<td></td>
</tr>
<tr>
<td>Centers of Excellence</td>
<td>$2,041,570</td>
<td>$2,041,570</td>
<td></td>
</tr>
<tr>
<td>Disability Accomodations</td>
<td>$1,740,808</td>
<td>$1,740,808</td>
<td></td>
</tr>
<tr>
<td>Employment Resource Center</td>
<td>$1,139,716</td>
<td>$1,139,716</td>
<td></td>
</tr>
<tr>
<td>Gateway Center</td>
<td>$68,010</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Hospital Employee Education &amp; Training</td>
<td>$2,040,306</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Labor Education &amp; Research Center*</td>
<td>$162,868</td>
<td>$162,868</td>
<td></td>
</tr>
<tr>
<td>Opportunity Grants</td>
<td>$12,500,000</td>
<td>$12,500,000</td>
<td></td>
</tr>
<tr>
<td>Students of Color</td>
<td>$1,011,628</td>
<td>$1,011,628</td>
<td></td>
</tr>
<tr>
<td>Technology Transformation</td>
<td>$1,009,270</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>University Center of North Puget Sound</td>
<td>$1,989,000</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>University Contracts</td>
<td>$942,547</td>
<td>$942,547</td>
<td>Y</td>
</tr>
<tr>
<td>Workforce Training Coordination - Aerospace</td>
<td>$131,000</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>High Demand Aerospace Enrollments</td>
<td>$6,498,100</td>
<td>$6,498,100</td>
<td>Y</td>
</tr>
<tr>
<td>Student Achievement Initiative</td>
<td>$1,011,628</td>
<td>$1,011,628</td>
<td></td>
</tr>
<tr>
<td>Job Skills Program</td>
<td>$45,340</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fabrication Wing Incumbent Worker Training</td>
<td>$500,000</td>
<td>$500,000</td>
<td></td>
</tr>
<tr>
<td>Center of Excellence - Aerospace</td>
<td>$100,000</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Maritime Industries</td>
<td>$255,000</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Opportunity Center IT Project</td>
<td>$181,000</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Year Up Pilot Project</td>
<td>$350,000</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Para-educator Development</td>
<td>$168,000</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>MESA Support Services</td>
<td>$410,000</td>
<td>$410,000</td>
<td></td>
</tr>
<tr>
<td>Allied Health Program - SSC (H)</td>
<td>$-</td>
<td>$425,000</td>
<td></td>
</tr>
<tr>
<td>Labor Ed and Research Center</td>
<td>$-</td>
<td>$500,000</td>
<td></td>
</tr>
</tbody>
</table>

**Total Earmarks** | $49,069,864 | $44,227,645 |

## Provisos (Bolded are newly proposed in 2015-17)*

<table>
<thead>
<tr>
<th>Earmark</th>
<th>FY 2015 Earmark</th>
<th>FY 2016 Earmark</th>
<th>FTE?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worker Retraining</td>
<td>$33,261,000</td>
<td>$33,261,000</td>
<td>Y</td>
</tr>
<tr>
<td>High Demand Aerospace Enrollments</td>
<td>$8,000,000</td>
<td>-</td>
<td>Y</td>
</tr>
<tr>
<td>Student Achievement Initiative</td>
<td>$5,250,000</td>
<td>$5,250,000</td>
<td></td>
</tr>
<tr>
<td>Job Skills Program</td>
<td>$2,725,000</td>
<td>$2,725,000</td>
<td></td>
</tr>
<tr>
<td>Fabrication Wing Incumbent Worker Training</td>
<td>$500,000</td>
<td>$500,000</td>
<td></td>
</tr>
<tr>
<td>Center of Excellence - Aerospace</td>
<td>$100,000</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Maritime Industries</td>
<td>$255,000</td>
<td>-</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>Allied Health Program - SSC (H)</td>
<td>$-</td>
<td>$425,000</td>
<td></td>
</tr>
<tr>
<td>Labor Ed and Research Center</td>
<td>$-</td>
<td>$500,000</td>
<td></td>
</tr>
</tbody>
</table>

**Total Provisos** | $51,200,000 | $43,151,000 |

* Final list of provisos will be based on enacted budget
## Washington State Community College Tuition and Fee Rates

### 2013-14

#### Residents
- **Operating Fee**: $3,217.05
- **Building Fee**: $373.35
- **Maximum S & A Fee**: $409.65
- **Tuition and Fees**: $4,000.05

#### NonResidents
- **Operating Fee**: $8,051.85
- **Building Fee**: $773.70
- **Maximum S & A Fee**: $409.65
- **Tuition and Fees**: $9,235.20

### 2014-15

#### Residents
- **Operating Fee**: $3,217.05
- **Building Fee**: $373.35
- **Maximum S & A Fee**: $409.65
- **Tuition and Fees**: $4,000.05

#### NonResidents
- **Operating Fee**: $8,051.85
- **Building Fee**: $773.70
- **Maximum S & A Fee**: $409.65
- **Tuition and Fees**: $9,235.20

### Quarterly

#### Residents
- **Operating Fee**: $1,072.35
- **Building Fee**: $124.45
- **Maximum S & A Fee**: $136.55
- **Tuition and Fees**: $1,333.35

#### NonResidents
- **Operating Fee**: $2,683.95
- **Building Fee**: $257.90
- **Maximum S & A Fee**: $136.55
- **Tuition and Fees**: $3,078.40

### Per Credit

#### Residents
- **Operating Fee**: $85.68
- **Building Fee**: $10.58
- **Maximum S & A Fee**: $10.58
- **Tuition and Fees**: $106.84

#### NonResidents
- **Operating Fee**: $244.68
- **Building Fee**: $23.58
- **Maximum S & A Fee**: $23.58
- **Tuition and Fees**: $278.84

### Excess Credit Surcharges

#### Operating Fee Only
- **19+ Credits**: $96.26

### Ung GRADED Courses - per credit fees - Operating Fees deposited to Fund 149

<table>
<thead>
<tr>
<th>Comments</th>
<th>Fee</th>
<th>Comments</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Apprenticeship</strong> (Clock hour equivalent)</td>
<td>50% waiver</td>
<td>$53.00 per credit</td>
<td>$53.00 per credit</td>
</tr>
<tr>
<td><strong>ABE, ESL, GED</strong></td>
<td>$25 per student per quarter</td>
<td>$25 per student per quarter</td>
<td></td>
</tr>
<tr>
<td><strong>Competency Based Programs</strong></td>
<td>Not Applicable</td>
<td>Method for establishing tuition governed by WAC 131-28-025, subsection (2), amended by State Board Resolution 14-09-60 (Sept. 10, 2014)</td>
<td></td>
</tr>
</tbody>
</table>

Technical colleges may increase the 2013-14 operating fee rates by no more than the percentage increase authorized for community colleges by the State Board, or fully adopt the tuition fee charge schedule adopted by the State Board for community colleges, as provided by ESSB 6002, Section 603(6).

Trustees of the technical colleges are authorized in ESSB 6002, Section 603(7) to increase building fees by an amount judged reasonable in order to progress toward parity with the building fees charged students attending the community college for academic years 2013-2014 and 2014-2015. All technical colleges will have reached parity with the community college building fee rates beginning the 2013-14 academic year.

Colleges are authorized to charge tuition to Running Start students when the student's choice of credit load exceeds the level that will be reimbursed by the school district.
2016 Enrollment Rules

Purpose: The Enrollment Rules are established as a method to ensure legislative targets are met and that resources are deployed systematically within the CTC system.

- The rules are set by which colleges will:
  o Be eligible for increases in their enrollment targets
  o Be allowed to count excess enrollments in periods of over-enrollment
- The rules provide parameters and definitions for the specific types of FTEs to be included or excluded in monitoring of state and other enrollments

Parameters and Definitions for Enrollment Types

Running Start students are not included in the monitoring of allocated state enrollments.

International Contract students cannot be counted toward the allocated state enrollment.

State Enrollment Rules

The following rules govern how State actual enrollments, used to measure attainment of the target allocated by the State Board, will be monitored and used in determining policy decisions in other program areas:

1. In the creation of the FY 2016 Enrollment Allocation Target, all changes to the target shall be initiated by rules in place during the 2015 year.

2. In the development future enrollment targets:
   A. A college district will be eligible to receive general for growth in their enrollments target if the district’s prior three year average actual enrollment was at least 100 percent of its prior three year average allocated enrollment.

3. In the development of future enrollment allocations, the base target for each district will be set using the following method:

A District’s base enrollment level is equal to their total enrollment target, less allocations governed by a legislative proviso or State Board Earmark:

   A. Comparing the three year average of a district’s enrollment target and actual enrollments, districts are grouped into two categories: over-enrolled and under-enrolled.
      I. Data used will be last three full academic years (e.g., for 2016, only 2012, 2013 and 2014 are available).
      II. Under-enrolled districts will have their initial target set at the three year actual enrollment level.
          a. The difference between three year target enrollments and three year actual enrollments is calculated for all under-enrolled schools
             i. The amount of enrollment is pooled for redistribution to over-enrolled schools
      III. Over-enrolled districts will have their initial target set at the three year target level.
         IV. In addition, over-enrolled districts will receive a share of the pool identified for re-distribution in Step A.2.a.i
             b. The difference between three year target enrollments and three year actual enrollments is calculated for all over-enrolled districts
c. These values are summed and a percentage share of over-enrollments is assigned to each over-enrolled district.
   i. The pool of enrollments in Step A.1.a.i is distributed using the percentage share

4. The District base enrollment value set in Three (3) above is added to any enrollments allocated and governed by proviso or earmark.

   A. This is enrollment total is the new target used to determine attainment.

5. Actual enrollments above 100 percent of a district’s 2016 fiscal year allocated enrollment target will be counted as excess enrollments.

Worker Retraining Enrollment

In addition to the rules above, the following rule applies to Worker Retraining enrollment allocations: College districts that fail to meet 100 percent of their Worker Retraining enrollment allocation for two consecutive years will have their Worker Retraining enrollment allocation and associated funding in the subsequent year reduced by 75 percent of the difference between the allocated and actual enrollment in the second year. College districts that fail to hit 100 percent of the base allocation enrollment target (as described in State Enrollment Rule 3 above) will be ineligible to receive increases in their Worker Retraining allocation in the next academic year.

Earmarked Enrollments

The funding for the following types of enrollments has been earmarked by the State Board and must be spent on these programs:

- Aerospace Apprenticeships
- Aerospace Enrollment Expansion (November 2013)
- Health Employee Education and Training
- University Contracts

Actual enrollments in earmarked programs will be tracked against allocated enrollments and will be reviewed by the Board quarterly. Districts are expected to enroll at allocated enrollment levels. Colleges under-enrolled in an earmarked program may be subject to a reduction in earmarked enrollments and associated funding.

Other Monitored Enrollments

Districts are expected to maintain strong commitment to the following types of enrollments:

- Adult Basic Education
- Apprenticeships
- I-BEST
Math Acceleration and Student Success Strategic Plan

Brief Description
In May 2014 the Board approved a proposal for developing a strategic plan for math acceleration and success in the community and technical college system. The Board charged staff to assemble and convene a system task force to develop a plan that builds on the college and system level work done to date, provides recommendations for supporting the work at scale across the system, and identifies metrics to measuring and evaluating progress. Through a series of meetings beginning in August 2014 the task force chaired by board member Wayne Martin and co-chaired by board member Elizabeth Chen, defined a set of principles and recommended actions that have now been reviewed and endorsed by key system groups and WACTC. This action item reviews the draft plan and asks for the Board to approve the plan.

How does this link to the System Direction, Mission Study, and Policy Focus
Improvements in pre-college education, especially in mathematics, are critical to addressing all aspects of SBCTC’s System Direction: meeting the demands for a skilled workforce, increasing student success and educational attainment for residents, and using innovative approaches to address these needs. These innovations are helping to close the statewide skills gap, increase degree completion, and invest in faculty/staff excellence, all important aspects of SBCTC’s Mission Study.

Background Information and Analysis
Board members had an opportunity to review and discuss the draft Math Acceleration and Student Success Strategic Plan at the March 26, 2015 Board meeting. Board members provided positive feedback on the draft Plan and asked staff for an implementation plan. In April, the Math Task Force convened for a final review of the Strategic Plan and to discuss implementation activities. Task Force members propose clarifying language on the recommendations which are reflected in the revised draft provided in Attachment A. The recommendations discussed by the Board in March are not changed in substance, but reorganized to more clearly lead to action steps.

The draft plan is grounded in core principles of degree completion, scalability and building on current best practices as described below, and offers the following set of recommendations for the Board’s consideration:

I. Define and promote college level math pathways tailored to students’ academic majors and/or professional and technical program requirements, aligning pre-college curriculum to those pathways.

II. Improve and expand academic and career pathway advising to help students choose math pathways that support their goals, and leave the door open for opportunities to achieve even higher goals.

III. Extend math reforms to improve opportunities for students interested in a path from professional and technical programs to baccalaureate programs.

IV. Engage faculty and staff in sustained work to bring improvements in math success to scale.
V. Expand the MESA program.

VI. Clearly define and use metrics for measuring progress.

The draft implementation plan is a work in progress (Attachment B). Current activities and to be developed activities are identified. Staff and task force members are discussing the math strategic plan with system groups in April and May to identify next steps for inclusion in the 2015-16 work plans for instruction, student services and institutional research commissions.

WACTC was briefed on the math strategic plan recommendations at their March 26-27, 2015 meeting. Action on the recommendations is anticipated during their April 24, 2015 meeting.

**Additional background information and analysis**

The following is a summary of background information provided at the March State Board meeting.

Washington community and technical colleges, like many two-year colleges across the nation, have focused significant attention in recent years on improving student success and completion in pre-college education programs, especially in mathematics. The specific reform approaches most frequently used have focused on reducing the length of remedial programs through “acceleration” models, including new curricular structures and new content pathways; instructional approaches emphasizing real-world contexts in the learning; and placement reforms incorporating multiple measures to the process of placing students into appropriate courses. The innovations in pre-college education have been so extensive, both at the local college and system levels, that there is a critical need now to understand more clearly how these innovations have worked and create a strategic plan for scaling the successes.

Math is a principle hurdle for students to complete degrees and certificates. If the college system is to increase its contribution to the Washington Student Achievement Council’s Road Map goals for 100 percent of adults to have a high school diploma and 70 percent of adults to have a college credential, math achievement must be improved.

The SBCTC Student Achievement Initiative includes successful attainment of college readiness in math and completion of a college level math course as key metrics for the Board’s performance funding system. In Washington State, 57 percent of the roughly 20,000 students entering the community and technical college system directly from high school enrolled in at least one pre-college course in 2010-11, 51 percent in math compared to only 19 percent in writing (SBCTC, Research Report 12-2, December 2012, *Role of Pre-College (Developmental and Remedial) Education*). Hispanics and African Americans were substantially more likely than all other students to be enrolled in these classes. While precollege education within community and technical colleges serves as a critical access point for many students into post-secondary education, fewer than half of those students referred to precollege education complete the recommended courses, and fewer still enroll, let alone complete, the college-level courses they need to pursue their college degrees. SBCTC and the colleges have implemented a number of efforts to improve math achievement, including curriculum redesign, incorporating technology and online resources, faculty development, multiple course placement tools, placement reciprocity among the colleges, acceleration models, negotiating with universities to broaden math pathways for transfer students, and curriculum and placement work with
local high schools. Every 1 percent reduction in remediation effort at community and technical colleges allows an estimated $1.2 million to be redeployed to serve students in college level classes.

To address these issues, the Board approved in May a system task force to develop a clear vision and strategic plan for math acceleration and success. The overall goals to be addressed:

- Increase successful completion of precollege and college level mathematics classes.
- Reduce the share of recent high school graduates requiring precollege math courses.
- Develop a common set of metrics for evaluating progress towards improving student success in pre-college and college level mathematics.

In addition to reviewing promising strategies and approaches from across the country, the task force also surveyed Washington community and technical colleges to determine what strategies colleges were pursuing locally and which ones were widely available to students on their campuses. Based on this review, the task force defined a set of core principles that shape the recommendations of the strategic plan:

1. The ultimate goal for the overall framework is to improve program completion for students by eliminating barriers to completing college level mathematics.

2. The framework emphasizes scalable approaches with the capacity to affect large numbers of students.

3. Building on current successes and within the defined principles, framework for redesign, and metrics, colleges will pursue a delivery model that best supports student success outcomes in the precollege and college level mathematics program at the institution. The model should involve a coordinated approach to changes in placement, pathways, and instructional shifts to improve student success.

**Potential Questions**

- What are the next steps for implementing the strategic plan, and what is the Board’s role in supporting that work?
- How can the Board support the effort to solicit state and private funding to support the implementation of the plan?

**Recommendation/Preferred Result**

Staff recommend approval of the system strategic plan for math acceleration and success (Attachment A) and will provide direction to staff on next steps.

Policy Manual Change Yes ☒ No ☐

Prepared by: Bill Moore, director, K-12 Partnerships 360-704-4346, bmoore@sbctc.edu

Jan Yoshiwara, deputy executive director, Education Services 360-704-4353, jyoshiwara@sbctc.edu
A resolution relating to a math acceleration and student success strategic plan

WHEREAS, math is a principle hurdle for students to complete degrees and certificates, and math achievement must be improved if the college system is to increase its contribution to the Washington Student Achievement Council’s Road Map goals for 100% of adults to have a high school diploma and 70% of adults to have a college credential, and

WHEREAS, SBCTC and the colleges over the past few years have implemented a number of efforts to improve math achievement but the system has not seen significant improvement in the overall percentage of students completing college-level math, and

WHEREAS, the Board charged and led a task force with developing a system strategic plan to recommend a framework for improving overall student success by eliminating barriers to completing college level mathematics, and building on current strategies working with some success at colleges in the system, and

WHEREAS, the Board endorses the task force recommendations to focus on a new pathways model that can be scaled across the system with clearly-identified metrics for measuring progress while maintaining institutional flexibility and control in implementing specific strategies within defined principles,

THEREFORE BE IT RESOLVED, that the State Board for Community and Technical Colleges approves the system strategic plan for math acceleration and success.

BE IT FURTHER RESOLVED, that the State Board for Community and Technical Colleges authorizes the Executive Director to make adjustments to this action, including any necessary changes to the State Board’s Policy Manual, as necessary, for actions taken by the Governor, Legislature, data corrections, externally imposed restrictions or guidelines, uniform accounting and reporting requirements, and unanticipated changes in state or federal law.

APPROVED AND ADOPTED on May 7, 2015

ATTEST:

_______________________________  ________________________________
Marty Brown, secretary            Shaunta Hyde, chair pro tempore
Strategic Plan for
Improving Student Math Success
in Community and Technical Colleges

Draft
April 22, 2015

“It is not that smart people study math; it is that studying math makes people smart.”
Anonymous high school math teacher

Executive Summary

Math is a basic building block of human civilization. Everyone needs to be able to reason with mathematics to be a civically literate citizen and a discerning consumer. In the 21st century, math skills are also growing in importance as a prerequisite to high-skill, high-wage jobs and careers, and to our state’s economic growth.

Lack of math attainment is a key barrier to students’ ability to complete job training and academic degree programs. Math has been a particular roadblock to academic success and increased lifetime earnings for students of color and students from low-income families – the students whose needs are most often left unmet by traditional structures and practices.

Community and technical colleges are central to solving this problem because they help recent high school graduates and older adults become college-ready; provide job training and certification for many mid-level jobs and careers; and prepare students to transfer to baccalaureate institutions. In each of these areas, math is the most common stumbling block that prevents students from achieving their academic and career goals.

This strategic plan aims to transform math from an obstacle to an engaging learning experience that opens doors of opportunity. The goal of this plan is to help more
students – especially traditionally underserved students – complete academic and professional-technical programs by eliminating barriers to success in math for all students.

The starting point

The starting point for this work is a decade of efforts that have produced:

- Clear standards for college readiness, created by the Transition Math Project, which also resulted in an enduring partnership between community and technical colleges and high school leaders and faculty
- Increased efforts to reduce the percentage of recent high school graduates who need pre-college\(^1\) math
- Multiple measures to determine students’ readiness for college-level math, and new academic strategies to help students succeed in initial college math courses
- An array of evidence-based reforms that help students progress through pre-college math faster, with instruction tailored to their goals – the product of a three-year Rethinking Pre-college Math project funded by the Bill and Melinda Gates Foundation
- Three distinct math pathways tailored to students’ goals, in recognition that different careers require different suites of math skills
- Removal of intermediate algebra as a prerequisite for some college level math courses
- Mathematics, Engineering, and Science Achievement (MESA) programs in six community and technical colleges, which help students who are low-income, first generation college students succeed in science, technology, engineering and math (STEM) fields.

\(^1\) We use the term “pre-college” throughout the document to refer to all courses and programs offered at community and technical colleges that are not college-level and don’t provide college credits for students.
The strategic plan

Math skills are critical for both students and our society, and community and technical colleges can play a key role in improving math education, increasing student program and degree completion, reducing income inequality, and promoting economic vitality in our state. In addressing this role, the key challenge of this plan is to scale up the work that has already been done through launching a statewide initiative that engages every community and technical college in system-wide work to improve math achievement, and thereby improve the percentage of students who successfully complete certificate and degree programs.

Six major efforts comprise the plan:

I. Define and promote college level math pathways tailored to students’ academic majors and/or professional and technical program requirements, aligning pre-college curriculum to those pathways.

II. Improve and expand academic and career pathway advising to help students choose math pathways that support their goals, and leave the door open for opportunities to achieve even higher goals.

III. Extend math reforms to improve opportunities for students interested in a path from professional and technical programs to baccalaureate programs.

IV. Engage faculty and staff in sustained work to bring improvements in math success to scale.

V. Expand the MESA program.

VI. Clearly define and use metrics for measuring progress.
How math achievement opens doors to success for all

Math is a basic building block of human civilization. In nearly every area of our lives, we weigh, count and measure. We also calculate batting averages, assess the R values of insulation, estimate our cars’ gas mileage, and worry about the growth rates of pension funds.

Beyond these everyday practical applications, math is a critical field of study for the high-skill, high-wage jobs that sustain our economy. But students who want to solve the problem of climate change, advance medical research and cure disease, or spur the next generation of technological innovation are not the only ones who need great math programs. Everyone needs the ability to reason with mathematics and to become flexible mathematical thinkers so they can be civically literate citizens and discerning consumers.

The role of Community and Technical Colleges in promoting math success

Our economy is producing more mid-level jobs that require higher levels of mathematical literacy, as well as more high-level professional positions. Successful community and technical college students are essential to ensure that Washington employers can hire Washington citizens for these jobs.

Community and technical college transfer students comprise 40% of every public baccalaureate graduating class in Washington. Three-fourths of these transfer graduates earned their Associate’s degree before transferring. For all of these successful transfer students, completing college math in community college is an important predictor that they will transfer in a reasonable time and earn a bachelor’s degree.

The role of math in professional-technical programs is also growing in importance and changing in its focus and requirements. Traditionally, these programs have prioritized applied math that is relevant to training for immediate employment. However, recent
innovations like the Applied Bachelor’s degrees are extending pathways for professional-
technical students to make career advances beyond that initial foothold in the job market. Such innovations underscore the importance of considering how the math required in professional-technical programs can also serve as a possible foundation for further educational attainment and career advancement.

For both academic-transfer and professional-technical students, pre-college math in community and technical colleges is a critical point because it is by far the most common barrier to student progression and completion of degrees or vocational certificate programs. Traditionally, in most community and technical colleges, these pre-college math programs have relied on a uniform approach to “remediate” students who have deficiencies in math skills. Far too often, students who start community and technical colleges in pre-college math get stuck there, and are unable to progress to and through college-level math.

Math is not a one-size-fits-all proposition. Students who want to be journalists, nurses, carpenters, or actuaries do not need the same math skills as those who pursue science, technology, engineering and math (STEM) professions. Math course content, course sequences, and instructional approaches can be tailored to the programs of study students intend to pursue, in a way that makes math relevant to their careers. Ultimately, far more jobs will require advanced math skills to use new technologies, but the math skills needed in different career areas may diverge even more than they do today.

In addition to rethinking math pathways, we must change expectations, instructional strategies, course design and student support structures so that math is transformed from an obstacle to an engaging learning experience that opens doors of opportunity. Studies show that students who struggle in math are far more likely to leave school before they earn the degree or certificate they need to get the job they want. Helping all students succeed in math can help them succeed in life.
Math has been a particular roadblock to academic success and increased lifetime earnings for students of color and students from low-income families – the students whose needs are most often left unmet by traditional structures and practices. These students are disproportionately represented in pre-college math programs, and have historically lower rates of completing math courses – and thus higher rates of leaving school before earning a degree or certificate.

The Community and Technical College system’s commitment:

Increasing math success for all

This strategic plan represents the community and technical colleges system’s commitment to improving all students’ success in math, and in their academic careers and professional lives.

The plan begins with the significant work already underway to improve math outcomes, including innovative collaboration with high school and university partners, and the work colleges are already doing as they re-examine and improve their own math instruction and college advising to meet the needs of a diverse student body.

This plan also includes metrics to measure progress and success for all students. These metrics highlight the critical importance that improving math has for Hispanic, African American and Native American students, who currently have lower success rates than others. Success in college math is a critical component for equity in college success.

Our goal is to help more students – especially traditionally underserved students – complete academic and professional-technical programs by eliminating barriers to success in math for all students.
The starting point: Work in progress

In the past decade, community and technical colleges have engaged in several major efforts to identify emerging best practices that accelerate student learning and success in math.

Setting clear standards for college readiness

Beginning in 2004, the Transition Math Project brought together K-12 and post-secondary educators and created clear, uniform standards for what constitutes college readiness in math in Washington state. It also created lasting partnerships that link high school and college leaders and faculty to ensure that instruction and testing is aligned with the new standards.

This work was the starting point for addressing the large percentage of recent high school graduates who need remedial, pre-college math classes when they begin their post-secondary education.

Reducing the share of recent high school graduates who need pre-college math

The Washington K-12 system has recently adopted the Common Core standards for college and career readiness as their State Learning Standards for mathematics and English Language Arts. These standards, more rigorous than previous standards in these areas, are being assessed formally in Washington beginning in spring 2015 using the Smarter Balanced assessment system, one of two multi-state assessment consortia aligned with the new standards. To help motivate students to achieve these new higher standards, Washington higher education institutions have created an agreement for the use of the high school (11th grade) assessments: starting this spring, high school students scoring at level 3 or 4 on the high school assessments (math and/or English) will be guaranteed a college level course option when entering any public postsecondary institution in Washington in fall 2016.
As part of this agreement, students scoring at level 2 (below college-ready) on the same assessment will also have a pathway to become college-ready before entering a community or technical college in Washington. A senior-year transition course, *Bridge to College Mathematics*, developed through a collaborative effort between college faculty and high school teachers, is being pilot-tested on 2014-15 and will be available to interested school districts starting in 2015-16 thanks to a multi-year grant from College Spark Washington. This class will emphasize quantitative reasoning, mathematical modeling, and real world applications; students who earn a B or better in the course will be offered the same placement agreement at all community and technical colleges that students who scored at level 3 on the Smarter Balanced are offered. In addition to the *Bridge to College Mathematics* course, colleges should work with their districts around advising, messaging, and other programmatic bridges to make sure that students scoring at level 2 (or below) are actively encouraged to persist toward college and college-readiness.

**Multiple measures for college readiness**

Incorporating the Smarter Balanced assessment into the placement process for colleges is part of a larger shift in thinking across the community and technical college system toward determining college readiness and course placement for incoming students. The traditional way of deciding who qualified for college-level math classes was to give prospective students a placement test and use specific cut scores on that test as the only means for deciding where students should be placed in course sequences in math and English. That practice is changing across the system, with colleges focusing more on providing students with a variety of alternatives for placement, including high school transcripts or locally-designed assessments in addition to the high school options noted above.
Generally, colleges are offering students multiple ways for placing into college level math and working to minimize the number of students who need pre-college coursework. Other strategies toward this end already in place include:

- The community and technical college system has also approved a placement reciprocity agreement in which colleges agree to honor a student’s course placement determination regardless of where in the community and technical colleges system that placement decision was made.

- Math refresher classes are also offered at many of the colleges several times each quarter as a way of helping recent high school graduates prepare for college level math classes before they start college.

- Students who are at or near the edge of college readiness in math may also get extra support to spur their success in college level math classes. One way colleges are working to provide this extra support is by creating “co-requisite” classes in which students take pre-college math simultaneously with college-level math.

Many of these strategies are also helping adult students who left high school years ago. These students often have jobs and families, and time is precious for them, so measures that help accelerate their progress are critical to their persistence and success.

**Rethinking pre-college math**

The traditional way of teaching pre-college math was to put students through a course sequence focused on content substantially the same as the one they experienced in high school, but at a faster pace than in high school. As Norton Grubb\(^2\) and others have observed, for too many students, the experience of pre-college math at community and technical colleges has been frustration and failure.

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\(^2\) Basic Skills Education in Community Colleges: Inside and Outside of Classrooms, December 2012
In Washington six community and technical colleges and the Northwest Indian College participated in the three-year “Rethinking Pre-College Math” project (funded by the Bill & Melinda Gates Foundation, 2009-2012) to examine how these practices could be changed. They focused on how to tailor pre-college math to specific programs of study and professional or vocational goals, and how to change curriculum and teaching methods to serve diverse students with diverse aspirations.

The Rethinking Pre-College Math project helped develop both innovative strategies and faculty leadership and engagement. The project engaged both full- and part-time math faculty in studying national research, trends and best practices, analyzing what math knowledge and skills are actually needed in various fields, and redesigning coursework and pedagogy to better meet students’ needs.

National research shows that when students move through coursework faster, they are far more likely to stay in college and complete degrees, so colleges in the project tested accelerated, “fast track” courses that allowed students to complete more than one course in a quarter, and modular, self-paced approaches with additional instructional support so that students could quickly get unstuck when they needed extra help. Research also points to greater success with technology-based approaches that reserve class time for more personalized instruction that includes teaching personal attributes such as persistence, attention to detail, and systematic approaches to problem-solving; colleges pursued these strategies with models like the lab “emporium” model or the “flipped” classroom.

Colleges across the Washington system, both within the Re-Thinking Pre-college Math project and on their own, have been working to improve their pre-college math programs through these various approaches. Technology-supported models, differentiated pathways, placement reforms, accelerated courses, and modularized curriculum are now available to some degree in most Washington community and technical colleges. To assess the extent of these activities, the task force conducted a college survey in late fall.
2014 to determine the nature and extent of the strategies underway at the colleges. The table below provides a brief summary and description of the findings.

Math Strategies at Washington Community & Technical Colleges
Survey Results (January 2015)
Source: Survey of 34 community and technical colleges, January 2015

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Examples of strategy</th>
<th>Widely Available to Students at the college?</th>
<th>Available to Students on Small Scale or Pilot Basis?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology-supported models</td>
<td>“Emporium” model, offering instruction in a lab setting with students working on modules at their own pace (with faculty support); “flipped” classroom shifting skills practice to online platform</td>
<td>14*</td>
<td>10</td>
</tr>
<tr>
<td>Differentiated pathways</td>
<td>Defining the specific math skills necessary for various academic pathways and tailoring course placement and interventions to these requirements</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>Placement reforms</td>
<td>Using multiple or alternative measures to place students, including high school transcripts, directed self-placement, testing, “brush-up” preparation</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Accelerated models (varied approaches)</td>
<td>Allowing students to complete multiple pre-college levels in a single term, or allowing students to enroll in college-level courses while receiving additional academic support to address skill deficiencies</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Modularized curriculum</td>
<td>Dividing the pre-college curriculum into a series of modules, often combined with an emporium lab model</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

* Number of colleges responding “yes”

To spread these innovations more broadly across the curriculum, colleges need to provide professional development opportunities for both full- and part-time math faculty. Faculty can use support to maintain rigorous academic standards while offering a much broader array of instructional strategies, including more student-directed learning, more grounding of math in real-world problem-solving, and closer linkages between math instruction and students’ academic and vocational pathways.
Creating math pathways linked to academic and career goals

Because not all fields of study require the same math knowledge and skills, there has been a national movement towards creating different pathways for students with different aspirations. Some students who haven’t chosen a specific major or career goal have at least some idea of the direction they intend to pursue. Others require more advising and career counseling at the outset to identify both initial and long-term goals. Students need to understand how to choose career and academic pathways that leave open the opportunity for moving up a career ladder, even if their initial goal is a vocational certificate or associate degree, because this may affect the math pathway they choose.

National math reformers have identified three pathways that describe what pre-college students in the university-transfer arena need:

- A statistics-intensive pathway teaches statistics along with arithmetic and algebra, and is geared for students interested in humanities or social sciences. Key examples are Statway™, co-developed by the Carnegie Foundation for the Advancement of Teaching and the University of Texas Charles A. Dana Center, and the Statistical Reasoning option in the Dana Center’s own New Mathways Project.

- A quantitative reasoning course sequence focuses on quantitative literacy that prepares students to take transferable, college level math that will prepare them for their professional, civic, and personal lives. Students majoring in academic areas (e.g., humanities programs) not requiring statistics would be well served by this pathway. The Dana Center’s Quantitative Reasoning option and the Carnegie Foundation’s Quantway™ are examples of this pathway.

- For students interested in science, technology, engineering or other math-intensive fields, an algebra-intensive path prepares students for introductory calculus. This pathway—an example is the Dana Center’s Reasoning with Functions (I and II)—most closely resembles the traditional default mathematics pathway.
Math transfer policy between community and technical colleges and baccalaureate institutions

Building on earlier work on Major-Related Program (MRP) pathways, colleges are rethinking math requirements and sequences. The Direct Transfer Agreement between community and technical colleges and public baccalaureate institutions long required that all students pass a traditional intermediate algebra course. This pre-college course was designed and intended as preparation for college pre-calculus (required for a STEM pathway), but not all of its content is meaningful preparation for other math pathways, such as statistics or quantitative reasoning. A 2013 update to the agreement incorporated the concept of math pathways into the Direct Transfer Agreement, removing the traditional intermediate algebra course as a prerequisite for all college level math courses. This opens opportunities for multiple versions of intermediate algebra supporting multiple pathways to college level math achievement based on students’ educational and career goals.

Expanding the Mathematics, Engineering and Science Achievement (MESA) program

Beginning in 2009, six community and technical colleges hosted MESA programs, which provide academic support, advising, and a learning community of STEM major students who share a study space. All are from underserved groups who are low-income, first-generation college students. MESA has been in Washington middle and high schools for 32 years, and is nationally known for its effectiveness in stimulating interest and success in STEM fields among students of color and low-income students with little or no family history of college attendance. MESA has shown similar and welcome efficacy among community and technical college students, and the State Board for Community and Technical Colleges is requesting $4.56 million in the 2015-17 state operating budget to expand its presence from six to 20 colleges. MESA expansion is a key strategy to close the equity gap and increase the number of STEM degrees earned in our state.
A strategic plan for increasing success in mathematics that promotes certificate and degree completion

The community and technical colleges system has accomplished a great deal since the advent of the Transition Math Project in 2004, but more sustained effort is needed to bring proven best practices and innovations to scale. Only by redoubling math reform efforts will all students in all colleges have a chance to succeed in math, and thereby overcome the largest, most pervasive barrier to program completion, academic advancement, and lifelong success.

In a nutshell, here’s what the community and technical colleges system proposes to do:

- **Build on** existing and scalable efforts to redesign math pathways, including curriculum and pedagogy aligned with students’ education and career goals, in order to smooth students’ transition into college-level math and improve their success in college-level math courses.

- Launch a statewide initiative that engages every community and technical college in a coordinated approach to changes in placement, pathways, and instructional shifts that leads to systemic math achievement improvement efforts.

To do this, six major efforts are required:

1. Define and promote college level math pathways tailored to students’ academic majors and/or professional and technical program requirements, aligning pre-college curriculum to those pathways

A variety of pathways initiatives are being implemented at colleges across the system. These models often include differentiated and redesigned content, supporting students into and through designated broad areas of career goals/academic programs of study;
acceleration approaches, including shortening sequences, minimizing amount of content repetition, and allowing students the opportunity to move through multiple course levels in a quarter; and using innovative technology and mathematics software to support student learning. What is needed is a coordinated approach across the system to connect and leverage the successful work currently underway helping students move from pre-college math programs into gateway courses and programs of study while maintaining a clear focus on math learning outcomes critical to success in college-level math.

This pathways work should also build on and link to the various current efforts focused on high school, college and university partnerships designed to improve the math college readiness of high school students while in high school.

II. Improve and expand academic and career pathway advising to help students choose math pathways that support their goals, and leave the door open for opportunities to achieve even higher goals.

Both students who have just graduated from high school and older students are often at sea about how to connect their career goals – which are often vague – to a program of study in college. Their first experiences at a college can be crucial in setting their course towards achievement and rising expectations, or disappointment and failure.

Yet student advising is often a limited process because advising resources have been eroded during the Great Recession and its serial budget reductions. Restoring, expanding, and improving student advising is a crucial challenge. All the math reforms in the world can’t succeed if students are not advised into the pathways and classes that set them on course for success.

Community and technical colleges need to help students identify career goals early, acknowledging those goals may change over time. A key to student persistence and completion is providing targeted advising and academic support linked to math pathways needed for higher education requirements and for long-term career success, addressing
student attributes related to math learning, and helping students develop skills as learners. Diagnostic placement that includes multiple measures and improved student placement preparation and awareness is also important, with a clear focus on screening students into rather than out of college-level work and identifying the appropriate level and kind of support needed to be successful.

III. Extend math reforms to improve opportunities for students interested in a path from professional and technical programs to baccalaureate programs.

It is important that students who earn a professional-technical certificate or two-year degree have the opportunity to build from that foundation to further education and higher-wage jobs. Students may need to move beyond a certificate or associate degree to a baccalaureate degree requiring additional college level quantitative skills. This consideration needs to be fully incorporated in the thinking and planning of math pathways, and in the student advising process.

IV. Engage faculty and staff in sustained work to bring improvements in math success to scale.

Most of the work to date has relied on individual colleges’ and faculty members’ willingness to pilot new curriculum, course sequences, and pedagogical changes. To identify what innovations are working for which students, and to spread these innovations across the system, regional meetings of math faculty and college staff are proposed to share results and encourage broad adoption of effective curricular pathways, math attributes, advising protocols, and professional development programs. This is vital to ensuring that tailored instruction and course sequences that meet the needs of diverse students become the norm rather than the exception. In addition, there should be focused and ongoing opportunities for all pre-college and college level math faculty to improve skills in pedagogy, especially for learners who struggle in math, and to collaborate with
high school teachers and university faculty on college readiness and math requirements for bachelor’s degrees.

This work must be sustained over multiple years to succeed, and it must be supported financially to be sustained. Colleges should be provided with funding for this purpose based on the depth of their level of involvement in making lasting, systemic changes, and on their success in improving student achievement and closing the opportunity gap for traditionally underserved groups.

V. Expand the MESA program.

MESA expansion is a key strategy to close the equity gap and increase the number of STEM degrees earned in our state. The State Board for Community and Technical Colleges is requesting $4.56 million in the 2015-17 state operating budget to expand its presence from six to 20 colleges.

VI. Clearly define and use metrics for measuring progress.

Community and technical colleges have a well-developed system of student achievement metrics that track student progress and reward colleges for improvements in student success. This system can be used to specifically track progress toward increasing completion of pre-college and college level math.

Based on this work, we have recommended a series of metrics for measuring our students’ progress and ultimate college success (see Appendix A). The first section measures college math and degree completion for students who intend to transfer to a four-year college or university or to earn an applied baccalaureate. The measures are disaggregated by student age and race/ethnicity. There are separate measures for students who come directly from high school, older students, and those who have to begin in pre-college math. There is also a college math completion metric for professional-technical students. Currently, most of these metrics show a trend of small, incremental
improvement. In addition, we need to assess specific math requirements of each college certificate and degree program and create a method for tracking achievement of those requirements.

Conclusions

Math skills are critical for both students and our society, and community and technical colleges can play a key role in improving math education and student success.

Math achievement is critical for degree completion. It is also essential to meet the needs of the state’s economy to increase the number of graduates with strong skills in quantitative reasoning and in STEM fields.

Equally important, significant, systemic improvement in the teaching and learning of math is essential to reducing income inequality and ensuring the success of traditionally underserved student groups.

Washington’s community and technical college system has the momentum, experience, and partnerships with K-12 and universities to change the trajectory of math achievement for all students, and this plan provides direction for moving this work forward.

Succeeding in this work will provide immeasurable benefits to our state’s economic vitality in the 21st century.
Appendix A: System Metrics

**Increase student success**: Percentage of all academic transfer students enrolled who earn Direct Transfer Agreement degree or become transfer ready (45 credits, includes college math)

<table>
<thead>
<tr>
<th>Annual % of Academic Transfer Students who Complete a Transfer Degree or Reach the Achievement Milestone of 45 College Credits that Include College Math</th>
<th>2012 (N=101,152)</th>
<th>2013 (N=97,261)</th>
<th>2014 (N=97,962)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong></td>
<td>17%</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>20 and under</td>
<td>19%</td>
<td>20%</td>
<td>18%</td>
</tr>
<tr>
<td>21 and over</td>
<td>16%</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>African American</td>
<td>11%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>19%</td>
<td>21%</td>
<td>20%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>14%</td>
<td>16%</td>
<td>16%</td>
</tr>
<tr>
<td>Native American</td>
<td>14%</td>
<td>15%</td>
<td>14%</td>
</tr>
<tr>
<td>Other</td>
<td>16%</td>
<td>17%</td>
<td>15%</td>
</tr>
<tr>
<td>White</td>
<td>18%</td>
<td>20%</td>
<td>19%</td>
</tr>
</tbody>
</table>

**Increase college math completion for students in an academic transfer path** (Direct Transfer Agreement associate degrees) - % starting the year with no prior college math that earn 5 college math credits by end of year

<table>
<thead>
<tr>
<th>Annual % of Academic Transfer Students who Started the Year with No College Math and Earned at Least 5 credits in College Math</th>
<th>2012 (N=78,314)</th>
<th>2013 (N=73,412)</th>
<th>2014 (N=73,645)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong></td>
<td>22%</td>
<td>23%</td>
<td>25%</td>
</tr>
<tr>
<td>20 and under</td>
<td>25%</td>
<td>26%</td>
<td>29%</td>
</tr>
<tr>
<td>21 and over</td>
<td>19%</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>African American</td>
<td>15%</td>
<td>16%</td>
<td>17%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>27%</td>
<td>29%</td>
<td>31%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>18%</td>
<td>19%</td>
<td>20%</td>
</tr>
<tr>
<td>Native American</td>
<td>17%</td>
<td>17%</td>
<td>19%</td>
</tr>
<tr>
<td>Other</td>
<td>22%</td>
<td>23%</td>
<td>25%</td>
</tr>
<tr>
<td>White</td>
<td>23%</td>
<td>24%</td>
<td>26%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annual % of Academic Transfer Students who Started the Year with No College Math and Earned at Least 5 credits in College STEM Math</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall</strong></td>
<td>8%</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>20 and under</td>
<td>11%</td>
<td>11%</td>
<td>13%</td>
</tr>
<tr>
<td>21 and over</td>
<td>5%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>African American</td>
<td>4%</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>12%</td>
<td>13%</td>
<td>16%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Native American</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>White</td>
<td>8%</td>
<td>8%</td>
<td>8%</td>
</tr>
</tbody>
</table>
Increase college math completion for academic transfer students starting in pre-college - % of current or prior pre-college math students starting with no college math that earn 5 college math credits

<table>
<thead>
<tr>
<th></th>
<th>2012 (N=39,374)</th>
<th>2013 (N=37,327)</th>
<th>2014 (N=35,213)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual % of All Academic Transfer Students with No College Math who Are Current or Prior Pre-College Math Students</td>
<td>50%</td>
<td>51%</td>
<td>48%</td>
</tr>
<tr>
<td>Annual % of All Current or Prior Pre-College Math Students that Earn 5 College Math Credits</td>
<td>22%</td>
<td>23%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Increase college math completion for high school graduates enrolling directly in college for academic transfer

<table>
<thead>
<tr>
<th></th>
<th>2012 (N=12,097)</th>
<th>2013 (N=11,287)</th>
<th>2014 (N=11,122)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual % of Prior Year High School Graduates who Complete 5 Credits in College Math in Their First Quarter of College</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Increase college math completion for professional technical students

<table>
<thead>
<tr>
<th>Annual % of Professional Technical Students who Started the Year with No College Math and Earned at Least 5 credits in College Math</th>
<th>2012 (N=74,538)</th>
<th>2013 (N=69,489)</th>
<th>2014 (N=65,913)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>17%</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>20 and under</td>
<td>17%</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>21 and over</td>
<td>17%</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>African American</td>
<td>10%</td>
<td>10%</td>
<td>13%</td>
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<tr>
<td>Asian/Pacific Islander</td>
<td>17%</td>
<td>18%</td>
<td>18%</td>
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<tr>
<td>Hispanic</td>
<td>13%</td>
<td>15%</td>
<td>16%</td>
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<tr>
<td>Native American</td>
<td>15%</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>Other</td>
<td>17%</td>
<td>14%</td>
<td>18%</td>
</tr>
<tr>
<td>White</td>
<td>18%</td>
<td>19%</td>
<td>20%</td>
</tr>
</tbody>
</table>
## Appendix B: Math Task Force Members

<table>
<thead>
<tr>
<th>State Board Members</th>
<th>Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wayne Martin, Chair</td>
<td></td>
</tr>
<tr>
<td>Elizabeth Chen, Vice Chair</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Trustees</th>
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</thead>
<tbody>
<tr>
<td>Dan Altmayer</td>
<td>Highline</td>
</tr>
<tr>
<td>Vicki Orrico</td>
<td>Bellevue</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Presidents</th>
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</thead>
<tbody>
<tr>
<td>Steve Hanson</td>
<td>Renton</td>
</tr>
<tr>
<td>David Mitchell</td>
<td>Olympic</td>
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<table>
<thead>
<tr>
<th>Instruction Commission</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Gail Miulli</td>
<td>Edmonds</td>
</tr>
<tr>
<td>Jeff Wagnitz</td>
<td>Highline</td>
</tr>
<tr>
<td>Tomas Ybarra</td>
<td>Yakima</td>
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<table>
<thead>
<tr>
<th>Research Planning Commission</th>
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</thead>
<tbody>
<tr>
<td>Wendy Hall</td>
<td>Lower Columbia</td>
</tr>
<tr>
<td>Cherisa Yarkin</td>
<td>Seattle Central</td>
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<table>
<thead>
<tr>
<th>Student Services Commission</th>
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</thead>
<tbody>
<tr>
<td>Leslie Blackaby</td>
<td>Yakima</td>
</tr>
<tr>
<td>Ata Karim</td>
<td>Bellevue</td>
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<table>
<thead>
<tr>
<th>College Faculty</th>
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</thead>
<tbody>
<tr>
<td>Andrea Cahan</td>
<td>Everett</td>
</tr>
<tr>
<td>Rebecca Hartzler</td>
<td>Seattle Central</td>
</tr>
<tr>
<td>Bev Vredevelt</td>
<td>Spokane Falls</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Other Participants</th>
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<tbody>
<tr>
<td>Gil Mendoza</td>
<td>OSPI</td>
</tr>
<tr>
<td>Tony Lee</td>
<td>Community Member</td>
</tr>
<tr>
<td>Ben Rarick</td>
<td>State Board of Education</td>
</tr>
<tr>
<td>Jane Sherman</td>
<td>Council of Presidents</td>
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<table>
<thead>
<tr>
<th>SBCTC</th>
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<tbody>
<tr>
<td>Jon Kerr</td>
<td>SBCTC</td>
</tr>
<tr>
<td>Darby Kaikkonen</td>
<td>SBCTC</td>
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<tr>
<td>Bill Moore</td>
<td>SBCTC</td>
</tr>
<tr>
<td>David Prince</td>
<td>SBCTC</td>
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<tr>
<td>Jan Yoshiwara</td>
<td>SBCTC</td>
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</tbody>
</table>
## Improving Student Success in Math in Community and Technical Colleges

### Draft Implementation Plan

**April 15, 2015**

<table>
<thead>
<tr>
<th>Major Recommendation</th>
<th>Activities</th>
<th>Participants</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define and promote college level math pathways tailored to students’ academic majors and/or professional and technical program requirements, aligning pre-college curriculum to those pathways</td>
<td>Pilot statistics pathway in partnership with the Carnegie Foundation for the Advancement of Teaching. Modify Direct Transfer Agreement to include statistics pathway. Build biennial budget request to implement pre-college and college math pathways. Pursue private foundation funding. Convene math pathways work group to integrate implementation work of commissions and councils. Review math strategic plan and recommendations, identify next steps and include in annual work plan.</td>
<td>Seattle Central College, Tacoma Community College. Joint Transfer Council, Instruction Commission, Council of Presidents staff, SBCTC staff WACTC, SBCTC approved $5.5 million in 2015-17 operating budget request. SBCTC staff Instruction, Student Services, Research and Planning Commissions; Councils for Workforce Education, Basic Skills, Advising, Multicultural students, Career Services, math faculty, SBCTC staff Instruction Commission</td>
<td>Pilots implemented 2011 Direct Transfer Agreement revisions approved 2013 SBCTC budget request approved June 2014. Spring/summer 2015 2015-16 Spring 2015, 2015-16</td>
</tr>
<tr>
<td>Improve and expand academic and career advising to help students choose math pathways that support their goals, and leave the door</td>
<td>Build biennial budget request to expand academic and career advising for students. Review math strategic plan and</td>
<td>Student Services Commission, WACTC, SBCTC approved $18 million in 2015-17 operating budget request. Student Services Commission</td>
<td>SBCTC budget request approved June 2014. Spring 2015, 2015-16</td>
</tr>
<tr>
<td>Open for opportunities to achieve even higher goals</td>
<td>Recommendations, identify next steps and include in annual work plan</td>
<td>SBCTC staff</td>
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<td>---</td>
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<tr>
<td>Extend math reforms to improve opportunities for students interested in a path from professional and technical programs to baccalaureate programs</td>
<td>Inventory math requirements for CTC technical degree programs. Review math strategic plan and recommendations, identify next steps and include in annual work plans</td>
<td>Instruction Commission, Workforce Education Council, Council for Basic Skills</td>
<td></td>
</tr>
<tr>
<td>Engage faculty and staff in sustained work to bring improvements in math success to scale</td>
<td>Identify acceleration models for pre-college to college level mathematics based on national best practices. Survey colleges to establish baseline on math initiatives based on national best practices. Review math strategic plan and recommendations, propose next steps. Conduct annual survey of math initiatives. Establish regional faculty and staff development opportunities focused on math pathways curricula and advising strategies.</td>
<td>Math Task Force, SBCTC staff Instruction Commission, SBCTC staff Washington Two-Year Mathematics conference, SBCTC staff Math Pathways Work Group, SBCTC staff Math Pathways Work Group, SBCTC staff.</td>
<td></td>
</tr>
<tr>
<td>Expand the MESA program</td>
<td>Join Washington MESA Board of Directors. Build biennial budget request to increase funding for the current 6 community college MESA programs and expand to 14 additional college MESA programs. Develop RFP for new MESA programs.</td>
<td>Jan Yoshiwara represents SBCTC on the MESA Board. WACTC and SBCTC approved $4.6 million in 2015-17 operating budget request. RFP developed by Washington MESA and SBCTC staff.</td>
<td></td>
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<tr>
<td>Clearly define and use metrics for measuring progress</td>
<td>Develop metrics and baseline data.</td>
<td></td>
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<tr>
<td>Review math strategic plan and recommendations, identify next steps and include in annual work plans.</td>
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<tr>
<td>Analyze college level data, identify areas of focus, track progress.</td>
<td></td>
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<tr>
<td>Analyze progress in math achievement using metrics.</td>
<td></td>
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<tr>
<td>Math Task Force examined baseline data and approved metrics developed by SBCTC research staff.</td>
<td></td>
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<tr>
<td>Research and Planning Commission.</td>
<td></td>
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<tr>
<td>Research and Planning Commission, SBCTC staff.</td>
<td></td>
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<td>Completed January 2015.</td>
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<tr>
<td>2015-16</td>
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<tr>
<td>Summer/Fall 2016</td>
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Final consideration of applied baccalaureate degrees

Brief description
In September 2014, the State Board for Community and Technical Colleges adopted a revised approval process, selection criteria and application materials for community and technical colleges seeking to offer an applied baccalaureate program. The final step in the approval process requires State Board action on the college’s application to offer the proposed applied baccalaureate degree.

How does this link to the System Design, Mission Study and Policy Focus
In the System Direction report, the State Board for Community and Technical Colleges expresses intent on building strong communities while supporting the growth of individuals and families to achieve a great global competitiveness, creating lasting prosperity for Washington state and its economy.

Colleges that provide applied baccalaureate programs are focused on three core areas in developing their Statement of Needs: Economic Demand, Student Success and Innovation. Colleges meet the needs of changing economies by increasing the number of skilled employees in the areas of greatest unmet need. Through this, colleges create greater access to higher education by enrolling underserved populations and ensure community and technical colleges are affordable and accessible for students. Applied baccalaureate degrees expand the pipeline from associate to bachelor’s degrees in critical areas in demand by employers and students. As part of the development of emerging programs, colleges with applied baccalaureate programs have addressed innovation by forming programs that are technology and globally focused.

Background information and analysis

8a) Grays Harbor College-BAS in Organizational Management
Grays Harbor College proposes a Bachelor of Applied Science degree in Organizational Management beginning fall 2015. This degree has been developed after extensive communication with community stakeholders who identified specific areas of need and presents an industry-driven curriculum. The degree provides a pathway for students with associate degrees in human services, criminal justice and business management to take leadership roles in non-profit and profit-based organizations. This degree is Grays Harbor College’s first applied baccalaureate program. A formal peer review process was completed proving the proposal demonstrated a commitment to a comprehensive student plan and proved a sustainable fiscal model. External reviewers were consulted, including the director of the Master in Public Administration program at The Evergreen State College and the dean of the School of Business at Saint Martin’s University.

8b) Grays Harbor and Green River College-BAS in Forest Resource Management
Grays Harbor College and Green River College propose a joint Bachelor of Applied Science degree in Forest Resource Management: Sampling and Assessment (Green River) and Operations (Grays Harbor). This degree is designed to prepare students for employment in forestry, natural resource planners, project coordinators, environmental technicians, conservation scientists, wildland fire supervisors and forest practices inspectors. The joint degree is envisioned to bring together the strengths and resources of two colleges resulting in the generation of a uniquely focused degree. Green River College would begin the initial class offering in fall 2015. Grays Harbor College anticipates beginning fall 2016. Green River and Grays Harbor participated in a peer review determining that the proposal meets the criteria for a
rigorous curriculum, qualified faculty, an admission policy conducive to an open access mission, adequate student support services and a sustainable fiscal plan.

8c) Green River College-BAS in Aeronautical Science
Green River College proposes a Bachelor of Applied Science degree in Aeronautical Science to meet the high demand for aviation professionals in the operations sector of the aviation industry beginning fall 2015. This degree will provide graduates with aeronautical technical knowledge that meet aviation industry operations, educational and job skill standards. Students prepare for career pathways as pilots, dispatchers, air traffic controllers, airport managers and the newly emerging unmanned aerial vehicle systems. The degree will provide a solid foundation of highly technical aeronautical knowledge relevant to and in support of Code of Federal Regulations Title 14, Aeronautics and Space Regulations and Procedures. This degree builds on a strong portfolio of associate in applied science degrees at Green River College, a college known for its strong aviation program.

8d) Spokane Falls Community College-BAS in Applied Management
Spokane Falls Community College proposes a Bachelor of Applied Science degree in Applied Management beginning fall 2015. The program builds upon the Associate of Applied Science in Business Management offered in Spokane where there has been significant program growth over the past several years. The degree is designed to meet current and anticipated demand for qualified managers across a wide array of industries, focusing specifically on the fields of manufacturing and health care. A formal peer review determined the degree met the criteria for a rigorous curriculum at the baccalaureate level, quality faculty, a specified admissions policy, adequate student support services, a sustainable and appropriate fiscal plan and evidence of collaboration with neighboring higher education institutions.

8e) Tacoma Community College-BAS in Health Information Management
Tacoma Community College proposes a Bachelor of Applied Science degree in Health Information Management which will prepare students for careers that involve acquiring, analyzing, and protecting digital and traditional media information vital to providing quality patient care beginning in fall 2015. With the move toward electronic health records and the implementation of the Affordable Care Act, professionals in the health information technology fields are in high demand. This applied baccalaureate degree is designed to build upon Tacoma’s current Associate of Applied Science in Health Information Technology and also provide a pathway for students who are certified as Registered Health Information Technicians but wish to earn the bachelor’s degree and Registered Health Information Administrator credential. Since this is Tacoma’s first applied baccalaureate degree program, a formal peer review process took place where the reviewers determined the proposal demonstrates a commitment to baccalaureate level rigor, a comprehensive student services plan, appropriate staff and administration and a sustainable fiscal model.

8f) Whatcom Community College-BAS in Information Technology: Networking
Whatcom Community College proposes a Bachelor of Applied Science degree in Information Technology: Networking beginning fall 2017. This degree will build upon Whatcom’s current Associate of Science in Computer Information Systems and Associate of Applied Science-Transfer in Cybersecurity while focusing on industry sectors including Industrial Control Systems, Cloud Computing and Mobile Technologies. Graduates will be prepared to enter the workforce as network administrators, computer and information systems managers or computer network architects. Whatcom is a National Center of Academic Excellence in Information Assurance 2-Year Education and the lead
institution for CyberWatch West, a National Science Foundation regional center for cybersecurity education. Whatcom participated in a formal peer review process where reviewers determined the proposal demonstrated a commitment to baccalaureate level rigor, a comprehensive student services plan, appropriate staff and administration and a sustainable fiscal model. Additionally, Whatcom has been in contact with neighboring Western Washington University and Bellingham Technical College to ensure seamless pathways for students and regional collaboration for this program.

**8g) Yakima Valley Community College-BAS in Information Technology: Networking-System Administration**

Yakima Valley Community College proposes a Bachelor of Applied Science degree in Information Technology: Networking-System Administration beginning fall 2015. The degree program will build upon Yakima Valley’s Associate of Applied Science degrees in Information Technology, Network Administrator and Support Specialist. The degree would provide additional expertise and skills for a workforce to expand businesses as well as provide educational opportunities for place-bound working adults in fields requiring bachelor’s degrees. Because Yakima Valley has received approval by the Northwest Commission to offer applied baccalaureate degrees, a formal peer review was not required. However, an informal peer review by community and technical college administrators and State Board staff determined that Yakima Valley had met the requirements for curricula rigor, qualified faculty, appropriate student support services for a baccalaureate-level program, an admission policy that adhered to the open access mission to serve diverse communities, a sustainable fiscal plan and evidence of discussions with neighboring institutions of higher education to support further student pathways.

**Potential questions**

- Do these applied baccalaureate degrees meet criteria established by the State Board for Community and Technical Colleges?

**Recommendation/preferred result**

These proposals meet criteria established by statute and board policy based on staff review and feedback from peer reviewers from the community and technical college system. Staff recommends State Board action on the following:

- Resolution 15-05-17 approving Grays Harbor College’s Bachelor of Applied Science in Organizational Management degree program.
- Resolution 15-05-18 approving Green River and Grays Harbor colleges’ joint Bachelor of Applied Science in Forest Management: Sampling and Assessment (Green River) and Operations (Grays Harbor) degree program.
- Resolution 15-05-20 approving Spokane Falls Community College’s Bachelor of Applied Science in Applied Management
- Resolution 15-05-21 approving Tacoma Community College’s Bachelor of Applied Science in Health Information Management degree program.
- Resolution 15-05-22 approving Whatcom Community College’s Bachelor of Applied Science in Information Technology: Networking degree program.
- Resolution 15-05-23 approving Yakima Valley Community College’s Bachelor of Applied Science in Information Technology: Networking-System Administration degree program.
Policy Manual change Yes ☐ No ☒

Prepared by: Joyce Hammer, director, Transfer Education
360-704-4338, jhammer@sbctc.edu
A resolution to approve Grays Harbor College’s application to offer a Bachelor of Applied Science in Organizational Management upon recommendation of the State Board for Community and Technical Colleges staff.

WHEREAS, Engrossed Second Substitute House Bill 2483, passed by the 2012 Washington State Legislature, authorizes the State Board for Community and Technical Colleges to approve all applied bachelor’s degree programs offered by community and technical colleges; and

WHEREAS, consistent with the Washington state Legislature’s requirement, the State Board developed objective criteria for the approval of community and technical college applied bachelor’s degrees; and

WHEREAS, the State Board for Community and Technical Colleges staff found that Grays Harbor College’s application provided evidence that met or exceeded all objective selection criteria and will expand bachelor degree capacity in the state;

THEREFORE BE IT RESOLVED that the State Board for Community and Technical Colleges approves the recommendation to authorize Grays Harbor College’s Bachelor of Applied Science Degree in Organizational Management.

BE IT FURTHER RESOLVED, that the State Board for Community and Technical Colleges authorizes the executive director to make adjustments to this action, including any necessary changes to the State Board’s Policy Manual, as necessary, for actions taken by the governor, Legislature, data corrections, externally imposed restrictions or guidelines, uniform accounting and reporting requirements, and unanticipated changes in state or federal law.

APPROVED AND ADOPTED on May 7, 2015.

ATTEST:

Marty Brown, secretary

Shaunta Hyde, chair pro tempore
A resolution to approve Green River and Grays Harbor colleges’ joint application to offer a Bachelor of Applied Science in Forest Management: Sampling and Assessment (Green River) and Operations (Grays Harbor) upon recommendation of the State Board for Community and Technical Colleges staff.

WHEREAS, Engrossed Second Substitute House Bill 2483, passed by the 2012 Washington state Legislature, authorizes the State Board for Community and Technical Colleges to approve all applied bachelor’s degree programs offered by community and technical colleges; and

WHEREAS, consistent with the Washington state Legislature’s requirement, the State Board developed objective criteria for the approval of community and technical college applied bachelor’s degrees; and

WHEREAS, the State Board for Community and Technical Colleges staff found that Green River and Grays Harbor colleges’ joint application provided evidence that met or exceeded all objective selection criteria and will expand bachelor degree capacity in the state;

THEREFORE BE IT RESOLVED that the State Board for Community and Technical Colleges approves the recommendation to authorize Green River and Grays Harbor colleges’ to jointly offer a Bachelor of Applied Science in Forest Management.

BE IT FURTHER RESOLVED, that the State Board for Community and Technical Colleges authorizes the executive director to make adjustments to this action, including any necessary changes to the State Board’s Policy Manual, as necessary, for actions taken by the governor, Legislature, data corrections, externally imposed restrictions or guidelines, uniform accounting and reporting requirements, and unanticipated changes in state or federal law.

APPROVED AND ADOPTED on May 7, 2015.

ATTEST:

_______________________________  ________________________________
Marty Brown, secretary          Shaunta Hyde, chair pro tempore
A resolution to approve Green River College’s application to offer a Bachelor of Applied Sciences in Aeronautical Science upon recommendation of the State Board for Community and Technical Colleges staff.

WHEREAS, Engrossed Second Substitute House Bill 2483, passed by the 2012 Washington state Legislature, authorizes the State Board for Community and Technical Colleges to approve all applied bachelor’s degree programs offered by community and technical colleges; and

WHEREAS, consistent with the Washington state Legislature’s requirement, the State Board developed objective criteria for the approval of community and technical college applied bachelor’s degrees; and

WHEREAS, the State Board for Community and Technical Colleges staff found Green River College’s application provided evidence that met or exceeded all objective selection criteria and will expand bachelor degree capacity in the state;

THEREFORE BE IT RESOLVED that the State Board for Community and Technical Colleges approves the recommendation to authorize Green River College’s Bachelor of Applied Science in Aeronautical Science.

BE IT FURTHER RESOLVED, that the State Board for Community and Technical Colleges authorizes the executive director to make adjustments to this action, including any necessary changes to the State Board’s Policy Manual, as necessary, for actions taken by the governor, Legislature, data corrections, externally imposed restrictions or guidelines, uniform accounting and reporting requirements, and unanticipated changes in state or federal law.

APPROVED AND ADOPTED on May 7, 2015.

ATTEST:

Marty Brown, secretary

Shaunta Hyde, chair pro tempore
A resolution to approve Spokane Falls Community College’s application to offer a Bachelor of Applied Sciences in Applied Management upon recommendation of the State Board for Community and Technical Colleges staff.

WHEREAS, Engrossed Second Substitute House Bill 2483, passed by the 2012 Washington state Legislature, authorizes the State Board for Community and Technical Colleges to approve all applied bachelor’s degree programs offered by community and technical colleges; and

WHEREAS, consistent with the Washington state Legislature’s requirement, the State Board developed objective criteria for the approval of community and technical college applied bachelor’s degrees; and

WHEREAS, the State Board for Community and Technical Colleges staff found that Spokane Falls Community College’s application provided evidence that met or exceeded all objective selection criteria and will expand bachelor degree capacity in the state;

THEREFORE BE IT RESOLVED that the State Board for Community and Technical Colleges approves the recommendation to authorize Spokane Falls Community College’s Bachelor of Applied Science in Applied Management.

BE IT FURTHER RESOLVED, that the State Board for Community and Technical Colleges authorizes the executive director to make adjustments to this action, including any necessary changes to the State Board’s Policy Manual, as necessary, for actions taken by the governor, Legislature, data corrections, externally imposed restrictions or guidelines, uniform accounting and reporting requirements, and unanticipated changes in state or federal law.

APPROVED AND ADOPTED on May 7, 2015.

ATTEST:

_______________________________  ______________________________
Marty Brown, secretary            Shaunta Hyde, chair pro tempore
A resolution to approve Tacoma Community College’s application to offer a Bachelor of Applied Science in Health Information Management upon recommendation of the State Board for Community and Technical Colleges staff.

WHEREAS, Engrossed Second Substitute House Bill 2483, passed by the 2012 Washington state Legislature, authorizes the State Board for Community and Technical Colleges to approve all applied bachelor’s degree programs offered by community and technical colleges; and

WHEREAS, consistent with the Washington state Legislature’s requirement, the State Board developed objective criteria for the approval of community and technical college applied bachelor’s degrees; and

WHEREAS, the State Board for Community and Technical Colleges staff found that Tacoma Community College’s application provided evidence that met or exceeded all objective selection criteria and will expand bachelor degree capacity in the state;

THEREFORE BE IT RESOLVED that the State Board for Community and Technical Colleges approves the recommendation to authorize Tacoma Community College’s Bachelor of Applied Science in Health Information Management.

BE IT FURTHER RESOLVED, that the State Board for Community and Technical Colleges authorizes the executive director to make adjustments to this action, including any necessary changes to the State Board’s Policy Manual, as necessary, for actions taken by the governor, Legislature, data corrections, externally imposed restrictions or guidelines, uniform accounting and reporting requirements, and unanticipated changes in state or federal law.

APPROVED AND ADOPTED on May 7, 2015.

ATTEST:

Marty Brown, secretary

Shaunta Hyde, chair pro tempore
A resolution to approve Whatcom Community College’s application to offer a Bachelor of Applied Science in Information Technology: Networking upon recommendation of the State Board for Community and Technical Colleges staff.

WHEREAS, Engrossed Second Substitute House Bill 2483, passed by the 2012 Washington state Legislature, authorizes the State Board for Community and Technical Colleges to approve all applied bachelor’s degree programs offered by community and technical colleges; and

WHEREAS, consistent with the Washington state Legislature’s requirement, the State Board developed objective criteria for the approval of community and technical college applied bachelor’s degrees; and

WHEREAS, the State Board for Community and Technical Colleges staff found that Whatcom Community College’s application provided evidence that met or exceeded all objective selection criteria and will expand bachelor degree capacity in the state;

THEREFORE BE IT RESOLVED that the State Board for Community and Technical Colleges approves the recommendation to authorize Whatcom Community College’s Bachelor of Applied Science in Information Technology: Networking.

BE IT FURTHER RESOLVED, that the State Board for Community and Technical Colleges authorizes the executive director to make adjustments to this action, including any necessary changes to the State Board’s Policy Manual, as necessary, for actions taken by the governor, Legislature, data corrections, externally imposed restrictions or guidelines, uniform accounting and reporting requirements, and unanticipated changes in state or federal law.

APPROVED AND ADOPTED on May 7, 2015.

ATTEST:

Marty Brown, secretary

Shaunta Hyde, chair pro tempore
A resolution to approve Yakima Valley Community College’s application to offer a Bachelor of Applied Sciences in Information Technology: Networking-System Administration upon recommendation of the State Board for Community and Technical Colleges staff.

WHEREAS, Engrossed Second Substitute House Bill 2483, passed by the 2012 Washington state Legislature, authorizes the State Board for Community and Technical Colleges to approve all applied bachelor’s degree programs offered by community and technical colleges; and

WHEREAS, consistent with the Washington state Legislature’s requirement, the State Board developed objective criteria for the approval of community and technical college applied bachelor’s degrees; and

WHEREAS, the State Board for Community and Technical Colleges staff found that Yakima Valley Community College’s application provided evidence that met or exceeded all objective selection criteria and will expand bachelor degree capacity in the state;

THEREFORE BE IT RESOLVED that the State Board for Community and Technical Colleges approves the recommendation to authorize Yakima Valley Community College’s Bachelor of Applied Science in Information Technology: Networking-System Administration.

BE IT FURTHER RESOLVED, that the State Board for Community and Technical Colleges authorizes the executive director to make adjustments to this action, including any necessary changes to the State Board’s Policy Manual, as necessary, for actions taken by the governor, Legislature, data corrections, externally imposed restrictions or guidelines, uniform accounting and reporting requirements, and unanticipated changes in state or federal law.

APPROVED AND ADOPTED on May 7, 2015.

ATTEST:

_______________________________  ________________________________
Marty Brown, secretary        Shaunta Hyde, chair pro tempore
Legislative report

**Brief description**

The State Board will be briefed on the status of the state legislative session including progress towards reaching system-wide legislative goals and the possibility of a special legislative session.

The legislative report will also include a discussion regarding preliminary interim plans for legislative and congressional advocacy efforts. The discussion will help lay the groundwork for a future 2015-17 Government Relations Outreach Plan.

**How does this link to the System Direction, Mission Study and Policy Focus**

Creating and sustaining a successful year-round advocacy plan supports the community and technical college system goals outlined in the System Direction, Mission Study and Board Policy Focus in three major categories:

- **Student success:** increase statewide access, attainment and completion.
- **Economic development:** strengthen the state’s economy through business and labor partnerships to narrow skill gaps and meet emergent workforce needs.
- **Innovation:** leverage technology and other resources to identify creative solutions that lead to student completion.

These themes are evidenced in the 2015 legislative agenda and the 2015 federal legislative priorities. Year-round advocacy efforts will be outlined in an upcoming 2015-17 Government Relations Outreach Plan.

**Background information and analysis**

SBCTC Government Relations continues to advocate for system priorities both at the state and national levels. From state budgets and proposed legislation to implementing a robust outreach plan for the next biennium, efforts are ongoing to ensure the two-year college system continues to receive broad support.

**Legislative session**

The House and Senate budget proposals are far apart in terms of framework, new revenue and underlying policies that govern Washington State. The Legislature is now in special session in order to give legislators additional time to compromise on a statewide spending plan.

As outlined in Attachment A, the Bill Watch List includes a summary of bills that impact the community and technical college system. Many policy proposals were introduced during the 2015 regular legislative session including agency request, veterans’ services, dual credit and campus safety proposals.

**Advocacy: session and interim**

External outreach efforts are based on strategic timing and legislative/congressional activity year-round.
Session
Throughout the 2015 regular legislative session, SBCTC Government Relations led targeted weekly messaging per the 2015 Session Advocacy Plan. With support from SBCTC Communications and efforts by internal system constituencies, weekly legislative messages included SBCTC operating and capital budget requests, corrections education, compensation, Basic Education for Adults and other details about college priorities. Results of these efforts included improved communication between system representatives and elected officials, staff and other stakeholders to leverage support and elevate the overall two-year college system.

Interim
Advocacy efforts and issues differ during the summer and fall months. SBCTC Government Relations has begun planning new, creative external outreach activities to continue to build strong support for system initiatives and priorities. In collaboration with internal system constituencies and external stakeholders, state and national activities may include legislative/congressional visits, campus tours, committee work sessions, testimonies and other events. SBCTC Communications will be involved to leverage media coverage and support.

Potential issues
There are a number of ongoing legislative and congressional issues critical to the mission of the community and technical college system. These issues are opportunities for the system to engage with elected officials, key stakeholders and others to provide information about the two-year college system sustain a strong network of support and ensure system visibility during state and national policy discussions.

Legislative
• Operating budget proposals
• Capital budget projects and proposals
• Student access, affordability
• Performance/SAI
• Workforce issues/demands
• WSAC Roadmap goals
• Other issues

Congressional
• Higher Education Act reauthorization
• Perkins Act reauthorization
• Federal funding: workforce programs, apprenticeships, Basic Skills, financial aid (Pell Grants), grants (TAACCCT), etc.
• WIOA implementation
• Other issues

Potential questions
• Does the State Board have feedback about advocacy efforts for the state legislative session(s)?
• Are there suggestions from State Board members regarding planning for external outreach activities?

Recommendation/preferred result
The State Board will participate in a discussion about external outreach initiatives and provide feedback to SBCTC Government Relations.

Policy Manual change Yes ☐ No ☒

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