



Applied Baccalaureate Degree Program

Statement of Need

Forms A and B

**APPLIED BACHELOR DEGREE
STATEMENT OF NEED CRITERIA**

Criteria	Standard
1. Relationship to institutional role, mission, and program priorities.	Describe how the proposed program reflects and supports the role and mission of the institution, and reflects program priorities.
2. Support of the statewide strategic plans.	Describe how the program will support SBCTC Mission goals outlined in the Mission Study and HECB policies and goals for higher education as articulated in the Strategic Master Plan for Higher Education.
3. Employer/community demand for graduates with baccalaureate level of education proposed in the program.	<ul style="list-style-type: none"> • 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.
4. Applied baccalaureate program builds from existing professional and technical degree program offered by the institution.	<p>Describe the existing professional and technical degree program that will be used as the foundation for the applied baccalaureate program.</p> <ul style="list-style-type: none"> ▪ How long has the program been in existence? ▪ What has been the enrollment history of the program over the past five years?
5. Student demand for program within service area.	Evidence of student interest and demand from multiple sources, such as but not limited to: Students graduating with technical associate degrees in catchment-area, survey of students within region, demand in excess of opportunity to enroll in related traditional bachelor’s programs, and changes in industry standards.
6. Efforts to maximize state resources to serve place-bound students.	<ul style="list-style-type: none"> • 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.

Statement of Need
Bachelors of Applied Science in Professional Technical Teacher Education
“Teach Tech”

INTRODUCTION

The Bachelors of Applied Science in Professional Technical Teacher Education, Teach Tech, will help meet the statewide goals of; (1) increasing the number of baccalaureate degrees awarded by 2018, (2) expanding the workforce mission to serve local and statewide employers, (3) providing a professional development opportunity for existing professional-technical instructors, and (4) building educational pathways for professional and technical associate degree graduates and other professional and technical workers interested in a career as a workforce education instructor. This *Statement of Need* will identify unique aspects of the Teach Tech program and demonstrate the student demand and industry support received.

The Professional-Technical Teacher Education Degree would provide an educational pathway for students and workers seeking a career as a workforce educator in a community or technical college setting. Currently, this pathway does not exist and many community college workforce educators learn how to teach “on the job.” The program offers the dual benefit of building a new education pathway to an applied Bachelor’s degree and teaching credential, while simultaneously improving the quality and effectiveness of workforce education instruction across our state.

Teach Tech would provide an in-depth understanding of the community college student, as community colleges enroll individuals diverse in age, learning styles, prior education, race, ethnicity, language fluency, special needs, sexual orientation, religion, and socioeconomic status. The Teach Tech program includes an emphasis on basic theory of teaching and learning contextualized around the complexities of the adult learner, the role of community colleges in society, and issues of equity. Professional technical instructors will learn how to shift their focus from teaching purely for content mastery to student-centered learning.

This program is designed to meet the needs of working adults who are interested in attaining a baccalaureate degree in Professional Technical Teacher Education and will allow students to earn credit for prior learning through the portfolio assessment process. Graduates will receive a Washington State Professional Technical Teacher Certification. In addition to 25 letters of support received (*see Appendix A*), Teach Tech has been identified by the Governor’s Washington Council on Aerospace as a strategy to improve Washington’s competitiveness in the field.

Criterion 1 - Relationship to institutional role, mission, and program priorities

Mission, Values, Strategic Objectives: Community colleges have multiple missions that include high school completion/GED, adult basic skills/ESL, college transfer/BAS, workforce education, and continuing education. These missions overlap, but each serves a distinct and differentiated student population holding different educational goals and objectives. At the Seattle Colleges, workforce education students make up 37% of the 52,000 students served each year, but 47% of the students at South Seattle Community College. Looking just at the degree and certificate-focused enrollments in transfer and workforce education, 62% of these enrollments (FTE) at South Seattle were workforce education in 2009-10, the fourth highest percentage among Washington community colleges and the highest percentage in Western Washington.¹

The vision statement of the *2010-2015 District-Wide Strategic Plan* of the Seattle Colleges states that the colleges “will be learning centered in providing high-quality and innovative education, and in preparing our students for success and lifelong learning.” The District’s core values statement identifies teaching and learning (including imaginative, visionary, expert instruction and the use of innovative instructional technology), students, diversity, and partnerships. The plan identifies three key goals: increasing student learning and achievement, building community, business and educational partnerships, and increasing innovation and organizational effectiveness. Some key strategic objectives under these goals related directly to improving the effectiveness of workforce education instruction, include:

- Increase the number of students completing degrees and certificates;
- Increase professional-technical program graduates to meet local industry workforce needs; and
- Increase innovative instructional options for students.

South Seattle Community College’s core themes—student achievement, teaching and learning, college culture and climate, and community engagement and partnerships—echo the key goals outlined in the *District-Wide Strategic Plan*. The college’s mission statement calls out:

The college commits to meeting the diverse needs of students by providing:

- *Applied baccalaureate, associate degree, college transfer, technical and professional, and pre-college programs which prepare students to succeed in their careers and further their education.*
- *Responsive technical and professional training programs developed in collaboration with business, labor and industry.*
- *Student-centered and community centered programs and services which value diversity, support learning, and promote student success.*
- *Lifelong learning opportunities for the cultural, social, professional and personal development of the members of our communities.*

The college’s focus on providing high-quality instruction to a diverse community of learners is also called out in its just-released, year-one self-evaluation report (part of the accreditation

¹ Based on SBCTC 2009-10 Academic Year Enrollment Report data, see http://sbctc.edu/college/d_acad.aspx, pg 9.

review process).² Specifically, under the core theme of college culture and climate, SSCC has identified the following objectives:

- Hire and retain a diverse and culturally competent workforce; and
- Provide opportunities for employees to learn, engage, and contribute to the campus community.

The proposed Teach Tech BAS degree, which emphasizes cultural sensitivity and competence in the classroom and provides faculty with an opportunity for professional advancement, would directly support these key objectives, which the college has challenged itself to advance. It also supports the advancement of student learning and student success, by providing instructors with the knowledge, skills, and abilities they need to develop effective lesson plans, assessments, teaching strategies and learning resources.

Criterion 2 – Support of the Statewide Strategic Plans

The SBCTC has identified its strategic directions for the next 10 years.³ The first goal identified by the Board is to “strengthen state and local economies by meeting the demands for a well-educated and skilled workforce.” Workforce education is the primary way that community and technical colleges achieve this goal. It makes sense that in order to create a well-educated and skilled workforce, we need well-educated and skilled workforce education instructors. It also makes sense that these instructors achieve a level of education at least as high (if not higher) as the post-secondary degree that the students in their classrooms are seeking. Currently, this is not the case in many workforce education classrooms in our state, and the Teach Tech BAS program will help to change that.

At the end of the list of ten year goals, the SBCTC states that the “accomplishment of these goals rests upon the shoulders of our faculty and staff. They are essential to innovation in our colleges.” The Teach Tech program will provide the knowledge and skills that workforce education instructors will need to innovate in their classrooms and support student learning. The *Strategic Directions* document goes on to call for “investments in...professional development...to attract and retain talented faculty and staff.”

Similar to the SBCTC directions, the HECB’s *2008 Strategic Master Plan for Higher Education* calls for expansion of programs and degrees in high demand fields. As shown below, workforce education instructors are and will remain in high demand, their jobs typically require a Bachelor’s degrees or higher, and the supply of these instructors is limited and below the level of demand. Research shows that instructors who understand the teaching and learning process and know how to develop and deliver instruction produce more and better learning outcomes⁴. Thus, the Teach Tech BAS program is a “two-for” meeting the high demand for skilled instructors, but also helping us increase the supply of skilled workers in other high demand occupations—the focus of most CTC workforce programs. Investing in instructor professional development will help us meet the goal of increasing the supply of workers trained in high demand occupations.

² See <http://southseattle.edu/documents/accreditation/2011/year-one-report-Master-Document-8.pdf>.

³ See http://www.sbctc.edu/docs/sbctc_system_direction_final.pdf.

⁴ Certification of Postsecondary Career and Technical Instructors: Issues for Debate, Bazile, S., Walter, R., 2009)

The Master Plan calls for the expansion of baccalaureate degree production by 13,800 degrees by 2018, and the Teach Tech BAS program will help make that possible in a cost effective manner that reaches place-bound students. In all these ways, the proposal is consistent with the goals and objectives of the statewide plans for higher education.

Criterion 3 - Employer/community demand for graduates with baccalaureate level of education proposed in the program.

Employer demand must exceed regional supply of graduates with relevant degrees.

LOCAL EMPLOYER DEMAND: Community and Technical Colleges are the primary, first tier employers for Teach Tech graduates (according to the US Bureau of Labor Statistics 86% of postsecondary vocational instructors are employed at community colleges, technical and trade schools, or colleges and universities), with a second tier comprised of private, industry and government training providers. We analyzed labor market data using this universe of employers and found that in Washington State, there are projected to be 192 openings **per year** through 2018⁵. In addition, July 2011 actual data shows current growth from second quarter 2009 to second quarter 2011 at 124 jobs per year demonstrating the continued substantial demand for post-secondary vocational teachers during the height of the economic downturn. This data is supported by a review of the Washington State Board for Community and Technical Colleges website for faculty job postings. A review of the website on August 4, 2011 indicated over 70 job openings for professional technical faculty, approximately half are full time positions.

A review of these 70 job openings across the Washington State Community and Technical Colleges revealed that many of the technical faculty positions required a bachelor’s degree at minimum, such as positions at Lake Washington Technical College and Whatcom Community College. In some cases it was a preferred qualification, such as at Everett Community College (Aviation Maintenance) and South Seattle Community College (Welding) and in some cases a master’s degree was required, such as Tacoma Community Colleges (Interactive Media)

A recent survey of all 34 community and technical colleges in Washington State revealed overwhelming support and demand for the Teach Tech BAS Degree program. More than half of the system responded to a survey that asked leaders from the Instruction Commission to answer the following questions:

Question	Yes	No
In your opinion (i.e. when making hiring decisions), would having a BAS in Professional Technical Teacher Education add value to a professional/technical faculty candidate's application?	95.8%	4.2%
Does your college provide salary incentives or other incentives for professional/technical faculty to obtain a bachelor degree?	33%	67%
Approximately how many professional/technical faculty and staff currently working at your college do you think would have interest in enrolling in an online-hybrid BAS Professional Technical Teacher Education program at South Seattle CC?	Total of 146 faculty indicated interest	

⁵ Washington State Employment Security Department, 2011

Do you think having professional/technical faculty with a BAS degree in Professional Technical Teacher Education would enhance student success on your campus?	96%	4%
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Below are just a few of the comments from college leaders that accompanied the survey:

- *BTC offers an AAS-T in Professional Technical Education for our faculty who do not have a degree. Your BAS option would be perfect for program graduates to transfer to.*
- *I like the idea as it could enhance the teaching of faculty who are excellent content experts. I think it might help with the ongoing divide that exists between transfer and prof/tech faculty*
- *The BAS would help further develop the critical thinking skills of faculty in a way that could only help benefit student success. In addition, they could identify with the students' efforts to obtain their educational credential. Finally, the more they know about "teaching" the more effective they will be and the more successful their students will be.*

Colleges across the state are committed to high quality instruction despite the fact that only a third of respondents have a formal promotional advantage for those who have a bachelor's degree. Nearly 100% of those surveyed said that a BAS in Professional Technical Teacher Education would add value to a candidate's application and would increase student success.

NATIONAL PERSPECTIVE: As noted above, the snapshot of Washington's job openings and varying education requirements is consistent with the U.S. Department of Labor statement that "training requirements for postsecondary career and technical education teachers vary by State and subject". However, using the national dashboard for hiring expectations, we find that, **in general, career and technical education teachers need a bachelor's or graduate degree**, plus at least 3 years of work experience in their field" (2009 DOL Occupational Outlook Handbook).

Nationally, employment forecasts for postsecondary professional technical (vocational education) faculty show growth at a faster rate than the average of all other occupations (U.S. Department of Labor, 2010). Citations below from both the National Directors of Career and Technical Education, and Journal of Industrial Teacher Education demonstrate the importance of, and nationwide shortage for, highly educated postsecondary professional technical faculty.

"The 2008-2009 Occupational Outlook Handbook from the Bureau of Labor Statistics projected that the fastest growing careers would be in career and technical education (CTE) fields such as healthcare and trade and industrial (T & I) occupations. However, in order to cultivate a workforce to fill these jobs, students will require training from quality secondary and postsecondary CTE teachers – resources that are lacking across the nation due to a teacher shortage." (*Teacher Shortage Undermines CTE*, (2009, Conneely, N., and Uy, E., www.careertech.org).

The brief *Certification of Postsecondary career and Technical instructors: Issues for Debate* (Bazile, S., and Walter, R., 2009) states that, "...knowledge of subject matter does not mean that one will be an effective teacher. There must be safeguards in place to ensure that these teachers have been well trained in pedagogy".

NATIONAL CERTIFICATION MOVEMENT: Concerned by the fact that federal and state agencies have not developed a national quality standard for Career and Technical Education at the secondary and post-secondary level, the Association for Skilled and Technical Sciences (ASTS) initiated a nationwide project to develop such standards. ASTS (www.actedonline.org), a relatively new organization working in cooperation with the College of Education at the University of Missouri-St. Louis, has developed a three-tier certification process for professional technical faculty; (1) Master Certified and Technical Educator (CCTE): faculty must have a master’s degree from a regionally accredited institution, pedagogy certification, AAS degree in a technical field and document several other activities. (2) Associate level (CCTE):, educators must attain a baccalaureate degree and AAS degree in the technical field they will be teaching, appropriate pedagogical levels and other activities such as professional development, commitment and teaching experience. (3) Initial (CCTE): faculty must have an AAS degree and a small list of additional activities. **Currently, without Teach Tech, an estimated 40% of Washington’s professional technical faculty would only be candidates for initial ASTS certification, because they lack a Bachelor’s degree or higher.**

DEGREE GAP: Washington State Community Colleges, the U.S. Department of Labor, and Association of Skilled and Technical Sciences all indicate that a baccalaureate degree is the preferred level of educational credential for professional technical faculty, but the discrepancy between what is desired and what is available is demonstrated by the degree gap among technical faculty and all other faculty.

According to the American Association of Community Colleges, only 3% of all full-time community college faculty do not have a bachelor’s degree, yet 39% of professional technical faculty do not have a baccalaureate degree (see Figure A). A review of the Seattle Community College District faculty, Washington’s second largest post-secondary institution, reveals data indicating a similar problem, with over 40% of professional technical faculty lacking a bachelor’s degree. This statistic clearly demonstrates a significant disparity in baccalaureate degree attainment between professional technical faculty and all other community college faculty. Teach Tech will provide a pathway to help bridge this significant gap. For existing and incoming faculty, we believe one of the primary reasons for the disparity is that many in the apprenticeship and heavy technical disciplines do not have access to a baccalaureate pathway.

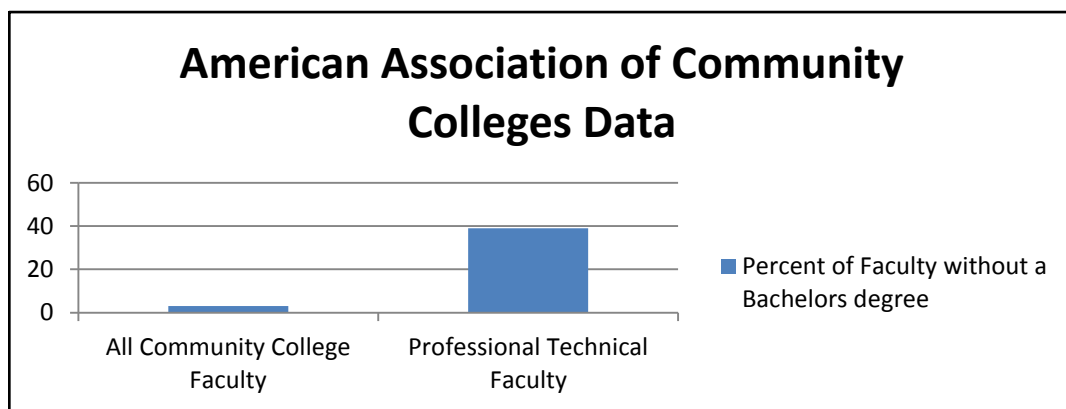


Figure A

SUPPORT FROM INDUSTRY & CAREER PATH FOR INCUMBENT WORKERS: The Teach Tech program has garnered wide support from the employer community beyond the community and technical college system (see Figure F, pg. 16). Although the primary target employers are community and technical colleges, some companies and organizations such as Microsoft, Snap-on Tools, Boeing, Seattle-King County Workforce Development Council, the Aerospace Futures Alliance, Aerospace Joint Apprenticeship Committee, Pioneer Human Services and Highline Public Schools have expressed interest in Teach Tech as a possible career path in education for existing employees from industry.

Demand must be based on data sources including but not limited to local employer survey, traditional labor market and industry data, trade association data, and other transactional data.

The demand for Teach Tech is based on multiple sources, including federal occupational information, state labor market data, documented community and technical college employer demand and private industry support. In addition, the Teach Tech program provides a strategy for increasing Washington’s competitiveness in the Aerospace sector (*See Appendix B, Washington Council on Aerospace*). Below summarizes the data and the sources used to demonstrate demand:

Source	Evidence
Boeing	Letter from Boeing explaining the difficulty of finding Technical Teachers at the Baccalaureate level, and indicates demand to educate incumbent employees to become technical teachers at the rate of 15 per year over the next 10 years.
Community and Technical College Employer Survey	Over half of Washington community and technical colleges indicated a need for Teach Tech, with 146 current faculty identified as candidates
Washington State Workforce Explorer	Post-Secondary, Vocational Education Teachers are “in demand,” and have projected annual state wide openings of 192 per year through 2018. Recent updates (July 2011) to this data indicate actual demand at 124 annually from second quarter 2009 to second quarter 2011
Washington State Board for Community and Technical Colleges	As of August 4, 2011, over 70 current job openings are posted for professional technical faculty
WorkSource Database	In Central Puget Sound alone, 147 Trainer and Instructor jobs are listed most of which are private employers.
2008-2009 Department of Labor Occupational Outlook Handbook	“Opportunities will also be excellent for postsecondary vocational teachers due to increased emphasis on postsecondary career and technical education. Job growth, combined with a large number of expected retirements”

Figure B

In addition to the above evidence of relevance to today’s employment market, the Washington Council on Aerospace, established per Executive Order 09-04, was tasked with finding ways to:

- Improve coordination, responsiveness, and integration of the State’s aerospace training, education, research, and development programs to meet industry needs
- Enhance the State’s economic climate for the industry
- Provide a forum for industry, labor and government to collaborate to ensure the needs of this vital industry are met in a timely and effective manner

- Ensure that Washington remains the best place in the world to design and manufacture aircrafts and grow jobs in the aerospace industry

Teach Tech is one of the strategies identified as an action item for 2011 (see Appendix B).

Criterion 4 - Applied baccalaureate program builds from existing professional and technical degree program offered by the institution.

Describe the existing professional and technical degree program that will be used as the foundation for the applied baccalaureate program

PROFESIONAL TECHNICAL PROGRAM AS FOUNDATION: South Seattle Community College is the right institution to advance the instructional competencies of the state’s technical faculty. The Teach Tech BAS degree program flows logically from SSCC’s institutional competencies and program priorities that have built the foundation for the applied baccalaureate degree. The college has a long history of providing workforce programs, currently offering 16 technical degree programs and a wide range of short-term programs leading to a certificate. As seen below, in just one academic year, SSCC produced over 1,200 technical education graduates.

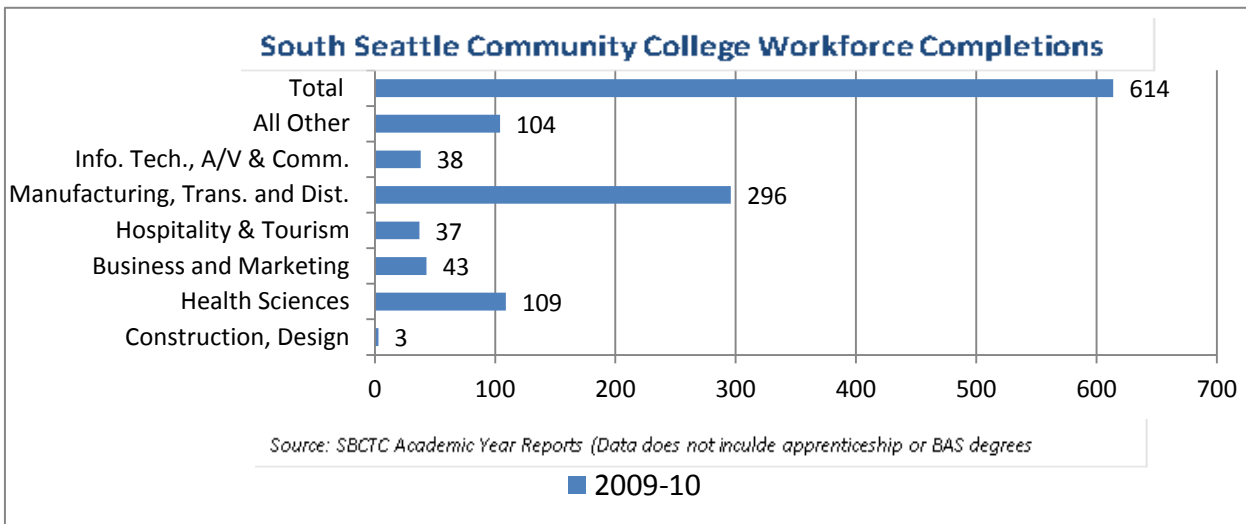


Figure C

Twelve of SSCC’s 16 programs offer AAS-T degrees which will provide immediate transferability into the BAS program. Teach Tech is not only designed to build on all of SSCC’s technical education programs, but all of Washington’s professional technical 2-year degree programs. The primary prerequisite for the program will be the combination of a 2-year professional technical associate degree and 2-5 years of work experience in a field related to the technical degree earned. The major areas in need of vocational training are identical to the areas where students will matriculate from. These major areas include:

- Agriculture, Conservation & Renewable Resources
- Healthcare Professions
- Hospitality, Foods and Recreation
- Industrial, Construction and Manufacturing
- Engineering
- Industrial, Construction and Manufacturing
- Information Technology
- Mechanics
- Media, Communication and Design
- Protective Services
- Transportation and Material Moving

SSCC'S SPECIFIC EXPERTISE: For several years SSCC has been hosting professional-technical educator summer boot camps with the support and direction of the Center of Excellence for Careers in Education and Green River Community College. These **week-long** boot camps are intensive, hands-on courses often led by SSCC faculty and target new or current workforce education faculty who have limited or no teaching experience. The boot camps introduce some of the same topics described above that will be covered by the BAS degree.

From 1973 through 2005, SSCC offered the Occupational Teacher Education certificate and degree program which has recently evolved into the Career and Technical Teacher Education Certification program. The program takes technically trained workers from business and industry and trains them to become certified CTE instructors in public and private K-12 schools. The courses in the program have defined learning outcomes based on state standards and aligned with core competencies for CTE instruction.

The overlap between this CTE instructor certification curriculum and the Teach Tech BAS degree is considerable. The two programs both target skilled professionals and technicians who seek a career change into instruction and/or wish to achieve an education credential. They both focus on technical skills instruction and cover similar topics such as legal issues, teaching strategies, classroom management, and student assessment. Teach Tech builds from the CTE instructor certification by providing an advance educational credential.

Finally, the hard work of defining the knowledge, skills and abilities of a successful workforce education instructor in Washington was developed a decade ago, and are described extensively in the *Professional-Technical Instructors Resource and Assessment Guide* (skill standards).⁶ These standards were developed through extensive DACUM work involving a wide range of subject matter experts. The skill standards identify the following major learning outcomes:

- Design and deliver a learner-centered instructional activity;
- Design and describe a learner-centered course;
- Evaluate learning environments and methods;
- Design, evaluate, revise, and deliver learner-centered instruction, using a variety of media, resources, and industry and other standards;
- Provide students appropriate academic/professional advising, assistance, and referrals;
- Evaluate learning systems and programs.
- Design and manage a support and development proposal and implementation plan for an instructional program or system.

The skill standards work connects the dots between these critical learning outcomes and key activities that a workforce education instructor performs on a daily basis. They provide the core foundation for the Teach Tech BAS curriculum. The CTC system has adopted the skills standards and the certification process which requires faculty to develop a self-assessment identifying teaching strengths and weaknesses and to create a professional development plan.

⁶ See <http://www.learningconnections.org/ss/vocinst.html>.

FILLS A GAP IN THE CONTINUUM: The Teach Tech program will fill an existing professional development gap in the career pathway for workforce education instructors between the numerous certification and Post baccalaureate or graduate level programs in adult education, college instruction, and technical training. As such, it will provide an essential addition to faculty professional development resources for the Washington CTC system, and beyond.



ADMISSIONS: AAS-T degrees require academic general education coursework needed for admission to the BAS program which includes college-level algebra, English composition, general psychology and 10 college-level elective credits. Students who have earned an AAS or similar degree that does not include 25 college-level general education credits will need to complete those courses prior to being fully admitted into the program.

The following table demonstrates the admissions criteria for students planning to matriculate with a 2-year technical degree.

Full Admission	Provisional Admission	Probationary Admission
<p>Students will be fully admitted to the program when all admission requirements have been completed and accepted by the BAS Admissions Committee. Admission requirements include the completion of a 2-year technical degree, college-level algebra, English composition, general psychology, and 10 college-level elective credits in addition students will need to demonstrate 2-5 years of work experience in a field related to their technical degree.</p>	<p>Students who are within 25 quarter credits of completing the Full Admission requirements may be admitted provisionally into the program on a space available basis. Students provisionally admitted to the program must demonstrate satisfactory progress toward meeting the Full Admission requirements in order to remain active.</p>	<p>Students with a cumulative G.P.A. below 2.5 may be admitted on a probationary basis. Students must maintain a quarterly cumulative G.P.A. of 2.5 or higher for the first 30 quarter credits and then petition to the BAS Admissions Committee for Full or Provisional Admission.</p>

Figure D

Priority admission will be given to students with a Washington State AAS-T degree. Students with a Washington AA or AS - Transfer degree in a relevant field of study may also be admitted into the program on a space available basis. Students entering under these degrees will still need to complete all of the upper-division courses and will be required to work with program faculty to develop appropriate substitutions for the lower-division general education courses.

How long has the program been in existence?

The current system of 34 community and technical colleges are governed by Washington's Community and Technical College Act of 1991 which provides for a state system of community and technical colleges (Washington State Board for Community and Technical Colleges website). Specifically, South Seattle Community College has been offering technical degrees for more than 40 years.

At SSCC, the Occupational Teacher Education Degree was in existence for 32 years and the CTE certification has been offered for 6 years. The College has assumed responsibility to host and run the Professional-Technical Educator Boot Camp for the last four years.

What has been the enrollment history of the program over the past five years?

The Occupational Teacher Education Degree at SSCC historically produced 14 FTE's, serving an average of 20 students per year, and now the CTE certification program is serving close to 400 students per year. From a broader perspective, the following table demonstrates the graduation rate for professional technical programs that would be available to matriculate into the Teach Tech program:

System-wide Professional Technical Graduation Rates

College-Level Workforce Degrees	2005-06	2006-07	2007-08	2008-09	2009-10	5 Year Change
Applied Associate Degrees	7,376	7,253	7,328	7,430	8,065	9.3%

Figure E, Source: Student Achievement Initiative Community and Technical Colleges Academic Years 2006-07 to 2009-10

The above table indicates over 37,000 graduates from 05-06 to 09-10 with Applied Associate Degrees. The 9.3% increase in degree attainment over this 5-year span is an indicator of increased demand for highly qualified instructors to teach these programs.

South Seattle Community College has the knowledge and skills necessary to help students transition to a bachelor's program. In South's current Bachelor of Applied Science in Hospitality Management program, we have students who earned their 2-year technical degree over 20 years ago returning to attain a bachelor's degree that was previously not accessible. The primary administrator for Teach Tech will be Dr. Malcolm Grothe, Executive Dean at South Seattle Community College. Dr. Grothe currently teaches Adult Learning Theory for Seattle University.

Criterion 5 - Student demand for program within service area.

Evidence of student interest and demand from multiple sources, such as but not limited to: Students graduating with technical associate degrees in catchment-area, survey of students within region, demand in excess of opportunity to enroll in related traditional bachelor's programs, and changes in industry standards.

CURRENT STUDENT DEMAND: The Teach Tech program has identified significant student demand by surveying staff and faculty at the community and technical colleges as well as business and industry partners in the community. There is currently a waitlist of 139 students based on outreach to date. A request went out to the waitlist of prospective students (existing staff and faculty from across the 34 community and technical colleges), asking them to rate their degree of interest in the Teach Tech program. Seventy five percent indicated they were "Very Interested" (105 out of 139 students). Teach Tech's estimated graduation rate of 20 per year would only fill 7% of the estimated demand leaving 93% of the need unmet.

Based on actual students indicating interest, forecasts from administrators and letters from college presidents, we estimate an average of 8 potential students from each college in Washington. Teach Tech will be capable of graduating approximately 20 students per year, thus it would take the program a total of 9 years to meet the initial student demand. As indicated above, with no advertisement we currently have a waiting list of 139 students who are interested and are waiting for the program to begin. In addition to the obvious opportunity for current faculty to further their education, other factors are motivating participants to begin the program:

- Professional satisfaction and increased confidence as a better-equipped instructor

- Potential access to higher pay for instructors holding a bachelor’s degree
- Increased attractiveness to colleges hiring new faculty
- Possession of the prerequisites for entering a master’s degree program in Adult Education

WIDESPREAD SUPPORT: Letters of support for the program came from industry employers and from other community and technical colleges within the State. Business and Industry partners were asked to identify incumbent employees who are seriously interested in attaining the Teach Tech Bachelors of Applied Science degree. A comprehensive survey was developed for respondents and administered in a face to face interview process (see appendix C). The responses to the survey, as documented in the letters of support, indicate that current demand is approximately 80 prospective students who are ready to begin the program. Nineteen employers also indicated they would be willing to help recruit new students. Figure B summarizes the specific areas where employers were willing to contribute support. We learned from our interviews that most organizations, colleges and employers, felt that Teach Tech was a perfect solution for the professional development of technical instructors.

Figure F: Student Demand/Support – College and Industry

Business & Community Partners	Support Willing to Provide
Aerospace Futures Alliance	Recruitment, Annual Scholarship
National Resource Center for Materials Technology Education	Recruitment
Snap-on Industrial	Recruitment, 3-5 prospective students Annual Scholarship
Aerospace Joint Apprenticeship Committee	Recruitment, Annual Scholarship
Seattle King County Workforce Development Council	Recruitment
Boeing	\$25,000 start-up funding, and 15 professional Technical Teachers needed per year over the next 10 years
Highline Public Schools	Recruitment, 25 prospective students Professional Dev. funds
WA State Center of Excellence for Careers in Education	Recruitment, Skills Standards Updates
Center of Excellence for Aerospace and Advanced Materials Manufacturing	Recruitment

In summary, significant demand has been documented three ways demonstrating very real student demand:

- Letters of support signed by industry, community partners and college presidents – 80 students indicated
- Individual student inquiries – 139
- Statewide Instructional Council Survey – 146 faculty estimated

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

Identify similar programs offered by public or independent institutions in the region.

The Teach Tech program is a unique baccalaureate degree designed to meet the needs of postsecondary, industry specific, education in the State of Washington. Currently the only similar program offered in Washington State is through Southern Illinois University at McChord Air Force Base which primarily targets military personnel who are not included in State workforce data. No other bachelor level program exists in the State of Washington that targets professional technical instructors in heavy duty industry such as Diesel Maintenance, Aviation Maintenance, Welding, and Automotive Technology. Other programs that have some similar content include Western Washington University's post-baccalaureate level certificate in "Community and Technical College Teaching," and Central Washington University's 2-week, non-credit certificate in "Community College Teaching." As a result, Teach Tech would be the only degree of its kind in the State of Washington.

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.

UNIQUE FEATURES: The Teach Tech program has many attractive and unique features. In addition to being the first degree of its kind in the U.S., Teach Tech is designed to meet the needs of busy working adults through strategies that reduce time to completion as well as reaching students where they live and work. Another niche that Teach Tech fills is the alternative career pathway for so many workers on the shop floor across our workforce, a pathway in teaching that many may have never considered before.

The primary strategy that will **reduce students' time to completion** of the Teach Tech BAS degree is a robust Prior Learning Assessment (PLA) process. We anticipate many students to be current staff and faculty who have been working in professional technical education or industry and bring substantial prior knowledge to the classroom. Teach Tech will include a portfolio course where students have the opportunity to document and synthesize areas of prior learning and experience, culminating in a credit evaluation process. Many interested students listed the opportunity for PLA as a desirable component. Below are just a few of the comments we received:

- *"I have 24 years of experience as a software developer and earned by ATA in CIS/Web Development as a Presidents Scholar. I have been teaching as an Adjunct Professor for 3.5 years and would like very much to earn my bachelors."*
- *"I have been a Medical Assistant for 31 years; I graduated from a vocational college. I have an AA in Math and Science and ATA in Engineering. I am an instructor in the Allied Health Department as well as the department chair."*
- *"I completed the carpentry apprenticeship program in the early 80's. I taught for the*

apprenticeship program for 5 years and have been in the Training Coordinator for the past 4 years. I have a current 5 year Professional Technical Certificate from Bates. I have also taken a few additional classes toward my 2 year degree.”

- *“I would like to grandfather as much of my job experience and knowledge as possible. I have been teaching web development and design for 11 years and am the TLC coordinator. I am one class shy of my OTE certification and completed a Web degree in the late 90’s.”*

Another time reduction strategy is the integration of math, English, and workplace success skills with system-wide intended outcomes that include increased community and technical college completion rates and increased use of technology-driven curriculum. The content integration strategy may allow students to earn credits for more than one course while only spending the “seat” time for one course.

Teach Tech students will be busy working professionals from across Washington State, and possibly outside the state. This degree will be offered in a **hybrid format** with a significant portion of coursework delivered online while also maintaining a face-to-face component. The intent will be for students to meet live once a month for one day with the remaining course work completed on-line. A secondary advantage of Teach Tech students completing much of their program virtually will be the increase of hybrid and on-line learning models state wide as faculty will be applying learned technology to their own classrooms and programs.

Another important feature of Teach Tech is curriculum alignment to Washington’s *Skill Standards for Professional-Technical College Instructors and Customized Trainers*. The first edition of these standards, published in 2000, included broad critical work functions (e.g. “manage learning environments,” “develop outcomes, assessments, and curricula”) and associated performance indicators. South Seattle Community College has aligned the Teach Tech program and its associated course objectives with these *Skill Standards*. The content and delivery of Teach Tech coursework will also be guided by the criteria outlined in the NSF-funded *Teaching by Choice: Cultivating Exemplary Community College STEM Faculty* (Patton, 2006), where the curriculum will:

- Provide detailed exploration of the mission and goals of a community college
- Provide opportunities to enhance their teaching skills
- Use electronic technologies to make professional development programs accessible to those unable to attend campus programs
- Take advantage of web-based discussion boards

Describe options that have been explored for collaboration with other public baccalaureate institutions, businesses, and/or community organizations in the development of the proposal.

South Seattle Community College has engaged a wide range of baccalaureate institutions, business and organizations in the development of this proposal. SSCC is working with Dr. Bob Hughes of Seattle University; the Center for Occupational Research and Development (CORD), and the Washington State Center of Excellence for Careers in Education at Green River Community College to inform, align and validate the curriculum as well as lay the foundation for potential articulation opportunities. As previously mentioned, business and industry partners

were engaged through more than twenty in-person structured interviews about this BAS degree.

As an indication of further statewide collaboration, Dr. Stan Goto, Lead Faculty at Western Washington University's Community College Teaching program, has agreed to be one of two outside program evaluators called for in the next phase of the Washington State Applied Baccalaureate Degree approval process. Dr. Goto represents Western Washington University in a state wide team of educators lead by the Washington State Board for Community and Technical Colleges to collaborate and coordinate the programs designed for the education and training of community college teachers. Other organizations participating in this group include Central Washington University, Southern Illinois University, Seattle University, University of Washington, Lake Washington Technical College, Grays Harbor College, and South Seattle Community College. Teach Tech was presented to this group and received wide acceptance.

Conclusion

The Federal government indicates educational attainment for a postsecondary vocational instructor is typically at the baccalaureate degree level or higher. Documented student demand identifies at least 139 incumbent potential students, the Washington State Board for Community and Technical Colleges' faculty job posting web site with over 70 openings for professional technical faculty, and the unduplicated Workforce Explorer forecast of 192 opening per year indicates a significant gap between available programs and employer/student demand.

Boeing, one of Washington's largest employers has provided funding to begin the program and documented internal demand of 15 baccalaureate level educated technical teachers per year over the next 10 years.

Teach Tech is designed to build on all of Washington's professional technical 2-year degree programs. The primary prerequisite for the program will be the combination of a 2-year professional technical degree and 2-5 years of work experience in a field related to the technical degree earned. In the past five years, Washington's Community and Technical Colleges have conferred over 37,000 technical 2-year degrees, with a five year increase of 9.3%.

The data provided in this proposal demonstrates the high demand for a baccalaureate degree program in Professional Technical Teacher Education. Washington State must be willing to meet the needs of our ever-changing workforce in order to remain competitive in today's economy. The Teach Tech program will allow graduates to implore their knowledge of emerging technological trends to create well-educated and innovative workers.