

# PACE CAREER PATHWAYS PROGRAM PROFILE:

Integrated Basic Education and  
Skills Training (I-BEST) Program

April 2014

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Contract Number: HHSP23320072913YC

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## Introduction

A substantial gap exists between the skills of the labor force and the needs of employers in many high-growth industries, including healthcare, technology, and manufacturing. This gap results in unemployment while well-paying jobs go unfilled. At the same time, many low-skilled adults persist in low-wage work with little opportunity for advancement.<sup>1</sup> Career pathways programs aim to address the economy's vital need for skilled workers while offering low-wage workers the opportunity to obtain education and training and advance into the middle class.

To achieve their goals, career pathways programs offer low-skilled adults well-articulated training and employment steps targeted to locally in-demand jobs combined with promising instructional approaches and supportive services. Policy makers and practitioners show great interest in career pathways programs, in part because such programs provide guidance for developing improved education and training approaches for low-skilled individuals. Along these lines, the *Pathways for Advancing Careers and Education (PACE)* study is using an experimental design to assess the effectiveness of nine career pathways programs across the country (see Box).

An **experimental evaluation design** assigns individuals eligible for a program via lottery to a treatment group that can participate in the program or a control group that cannot participate but can access other services in the community. Because the assignment process is random, there are no systematic differences between the treatment and control groups at the time they enter the study. Thus, any differences detected during the follow-up period can be attributed to the program. Random assignment is considered the gold standard of program evaluation.

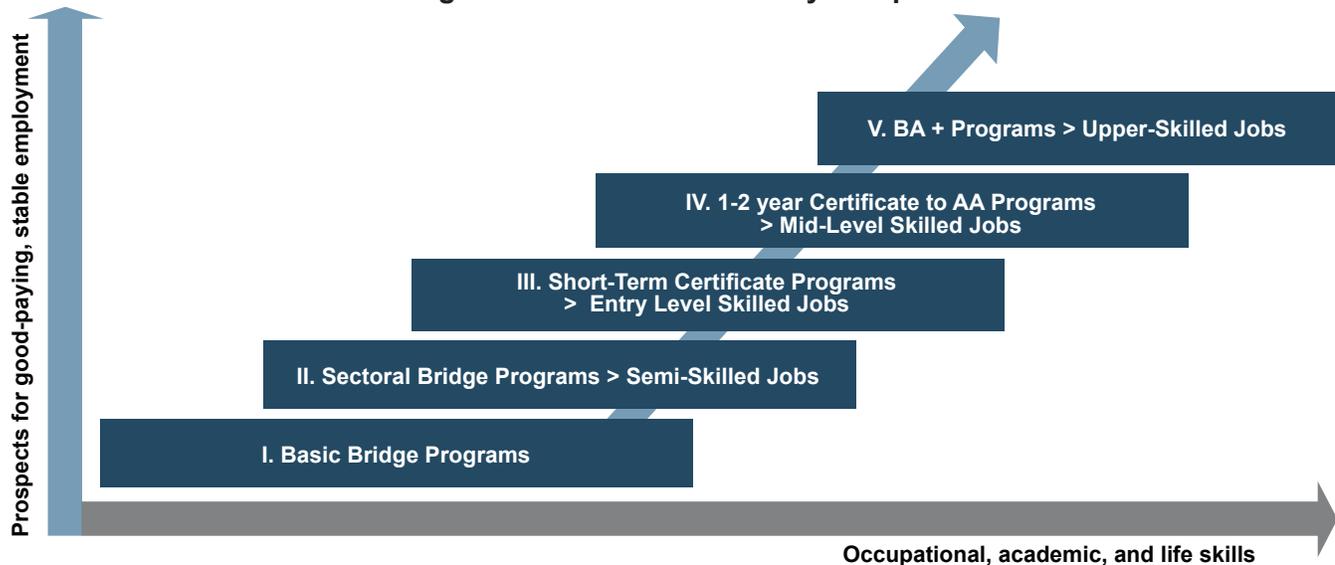
This profile is an overview of the *Integrated Basic Education and Skills Training (I-BEST)* program at three colleges in Washington State: Bellingham Technical College (BTC), Everett Community College (EvCC), and Whatcom Community College (WCC).<sup>2</sup> I-BEST is a statewide, multi-occupation career pathways program that targets individuals with low basic skills or limited English skills. By integrating basic skills instruction with occupational training and providing other support services, I-BEST aims to accelerate basic skills students' transition into and through a college-level occupational field of study.

This profile first describes the career pathways framework used in the PACE evaluation, which provides a common approach for describing and assessing career pathways programs.<sup>3</sup> It then discusses the I-BEST programs at each of the three colleges and how they fit within the career pathways framework.

## The PACE Career Pathways Framework

The career pathways approach presupposes that post-secondary education and training should be organized as a series of manageable steps leading to successively better credentials and employment opportunities in growing occupations. Each step is designed to prepare participants for the next level of employment and education and also to provide a credential with labor market value. To effectively engage, retain, and facilitate learning, programs integrate four core elements: (1) comprehensive assessment, (2) promising approaches to basic and occupational skills, (3) academic and nonacademic supports, and (4) strategies for connecting participants to employers. Individual programs vary in terms of emphasis placed on each core component, although all are comprehensive in nature to address the learning and life challenges facing adult participants. Career pathways programs typically include partnerships with

**Figure 1: The Career Pathways Steps**



multiple providers, including community-based organizations, community and technical colleges, human services and workforce agencies, and employers and their representatives.

Although steps in career pathways programs vary with their target populations, focal occupations, and service strategies, the broad training and employment levels shown in **Figure 1** provide a basis for classifying programs.

The first two steps (I and II) represent “on ramp” programs designed to prepare low-skilled participants for college-level training and lower-skilled jobs with a career focus. The next two steps (III and IV) provide college-level training for “middle skills” employment—jobs requiring some college but less than a bachelor’s degree (e.g., an associate’s degree or certificate). The final step (V) includes interventions to promote completion of a bachelor’s degree and more advanced credentials. Career pathways are designed to allow entries, exits, and re-entries at each stage—depending on skill levels and prior training, employment prospects, and changing personal situations. Programs vary in terms of entry and exit points as well as steps incorporated.

## The I-BEST Program

The I-BEST program **allows individuals with skill levels that are lower than normally required to enroll in college-level programs** to pursue credit-bearing, short-term certificate programs as well as

longer-term programs to earn degrees in high-demand occupations. I-BEST uses a team-teaching approach that pairs a basic skills instructor with an occupational instructor in the classroom where they can address students’ basic skills deficiencies while simultaneously providing occupational skills training. I-BEST students also have access to separate basic education classes and labs where they can receive **additional basic skills instruction** to support their work in a degree or certificate program. In addition, the program provides **supplemental financial aid and advising** to help students succeed in post-secondary education.

*The three colleges included in PACE vary in focus and target populations. Both BTC and WCC are located in Bellingham, about 90 miles northwest of Seattle. EvCC is located about 30 miles north of Seattle. BTC is a two-year technical college primarily serving a low-income population that is older than the typical college student. In the 2011–2012 academic year, the median student age was 28. As a technical college, the majority of students are in workforce education programs. WCC is a comprehensive two-year college where the majority of students are in academic or transfer (to a four year college) programs. EvCC is a two-year community college with a median student age of 26 in the 2011–2012 academic year. Compared with BTC and WCC, EvCC students are more evenly distributed between workforce education programs and academic/transfer programs.*

## Program Goals, Target Population, and Structure

The I-BEST program approach to serving low-skilled individuals is being replicated in several states and localities. Implemented in Washington State in 2004 and overseen



by the Washington State Board for Community and Technical Colleges, I-BEST is integrated into over 150 occupational training programs at all 34 technical and community colleges in the state. I-BEST programs in three Washington State community and technical colleges are participating in PACE—Bellingham Technical College (BTC)<sup>4</sup>, Everett Community College (EvCC)<sup>5</sup>, and Whatcom Community College (WCC)<sup>6</sup>. I-BEST aims to quickly boost students’ literacy and work skills so that they can earn credentials, gain employment, and earn a “living wage<sup>7</sup>.” The I-BEST model includes the following components:

- Programs must include required college-level, professional-technical credits that are part of a career pathway.
- Students must be pretested using the Comprehensive Adult Student Assessment System (CASAS) standardized test used to assess adult basic education (ABE) and English as a second language (ESL) students.
- Students must qualify for federally supported Level 1–3 basic skills upon enrollment based on the CASAS.

- A basic skills instructor and an occupational instructor from the professional-technical program must team teach in the same classroom with at least a 50 percent overlap of instructional time.
- Faculty must develop integrated program outcomes, jointly plan curriculum, and jointly assess student learning and skills development.
- Programs must train participants for occupations that appear on the in-demand list for the local area and that meet a minimum set wage.

I-BEST programs are embedded in occupational programs in a wide range of fields, including allied health, industrial maintenance, automotive, welding, early childhood education, business technology, trades and manufacturing, transportation, corrections, and others. Specific offerings vary by the three participating colleges, and not all I-BEST programs at the colleges are included in PACE. **Figure 2** shows the I-BEST occupational programs that are part of PACE at each participating college.

Each I-BEST program is designed so that students can earn “stackable credentials” in an articulated career pathway. Completers can continue to more advanced

**Figure 2: I-BEST Programs in PACE**

College	I-BEST Program in PACE <sup>8</sup>
Bellingham Technical College	<ul style="list-style-type: none"> <li>• Automotive</li> <li>• Electric</li> <li>• Nursing Assistant Certified (NAC)</li> <li>• Welding</li> </ul>
Everett Community College	<ul style="list-style-type: none"> <li>• Nursing Assistant Certified (NAC)</li> <li>• Sustainable Office Skills</li> <li>• Welding</li> </ul>
Whatcom Community College	<ul style="list-style-type: none"> <li>• Clerical Assistant</li> </ul>

courses at the college and receive additional certifications and degrees that correspond with higher-paying jobs (see **Figure 3**). I-BEST programming and credentials must be aligned with local labor market needs. For an I-BEST program to be approved by the State Board for Community and Technical Colleges, the college must demonstrate that the I-BEST coursework clearly leads to additional certificate or degree programs in an in-demand occupational field.

The I-BEST program aligns with Step II on the career pathways ladder (**Figure 1**). It is a sectoral bridge program that helps basic skills students make the transition to occupational coursework. Students may earn a short-term certificate upon completion of I-BEST or upon completion of additional quarters of coursework, an outcome that aligns with Step III on the ladder. Students may advance to Step IV on the ladder by pursuing associate-level degrees that build on credits earned through I-BEST.

In addition to the instructional components of the program, I-BEST students receive support from a dedicated advisor who provides guidance on academic issues, the college system, and career planning.

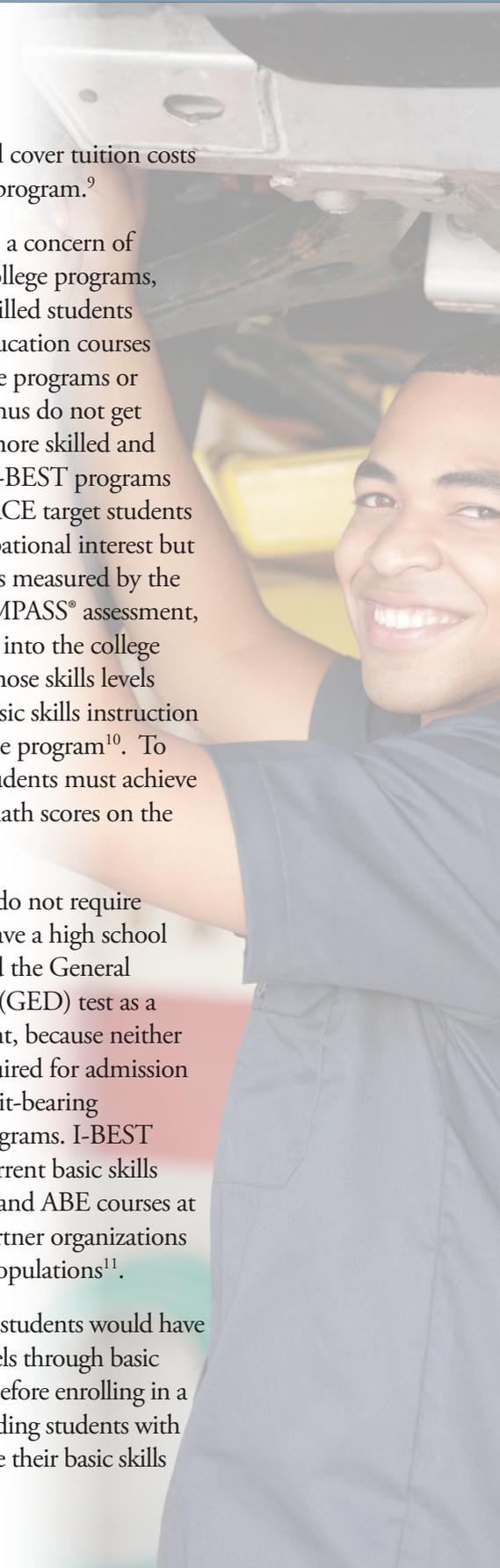
I-BEST students can also access the support services available to the general student population at the college, including tutoring and general academic advising. The three colleges participating in PACE cover tuition costs for all I-BEST participants. Many students receive assistance from other sources, such as Pell Grants and the Washington State Opportunity Grants program, but if funding from these sources is not available,

the I-BEST programs will cover tuition costs for students while in the program.<sup>9</sup>

I-BEST directly addresses a concern of traditional community college programs, namely that many low-skilled students do not complete basic education courses required for college degree programs or workforce training, and thus do not get training associated with more skilled and higher-paying jobs. The I-BEST programs at the three colleges in PACE target students who have a specific occupational interest but whose basic skills levels, as measured by the ACCUPLACER or COMPASS® assessment, are too low for admission into the college program of interest, or whose skills levels suggest that additional basic skills instruction is needed to succeed in the program<sup>10</sup>. To be eligible for I-BEST, students must achieve designated reading and math scores on the CASAS test.

BTC, WCC, and EvCC do not require I-BEST participants to have a high school diploma or to have passed the General Education Development (GED) test as a prerequisite for enrollment, because neither credential is typically required for admission to their college-level, credit-bearing occupational training programs. I-BEST programs recruit from current basic skills students enrolled in ESL and ABE courses at the colleges, and from partner organizations that serve similar target populations<sup>11</sup>.

In the absence of I-BEST, students would have to first raise their skills levels through basic education or ESL classes before enrolling in a college program. By providing students with an opportunity to improve their basic skills



while they are enrolled in credit-bearing occupational courses, I-BEST is designed to accelerate students' completion of occupational courses and certificates.

## Career Pathways Components

The I-BEST program uses a variety of service strategies to address the academic and nonacademic needs of participants. This section describes each college's approach to I-BEST, including **assessment**; **curriculum design**, particularly combining basic skills instruction with occupational training; **student supports**; and **connections to employment**.

### Comprehensive Assessment

Eligibility for I-BEST at all three schools is based on prospective students' scores on the CASAS reading and math tests.<sup>12,13</sup> At BTC and WCC, students are required to score between 221 (4th to 5th grade equivalent) and 256 (12th grade equivalent) on both tests to be eligible for I-BEST (the exception is the nursing assistant program at BTC, which has a lower eligibility requirement for math, a CASAS score of 211). EvCC requires students to score at least 201 on the math and reading CASAS tests, but typically recommends that students should score above 211 before enrolling in I-BEST.

In addition to an assessment of basic skills, prospective I-BEST students are required to meet with college staff in person before enrollment. During these meetings, staff assess individuals' academic and career goals, commitment to participation in the program, and potential barriers to success.

### Basic and Occupational Skills Training

The I-BEST program provides instruction in both basic skills and occupational training. As noted above, I-BEST credentials are designed so that they can be "stacked" with other credentials as part of an articulated

career pathway. I-BEST completers can continue to more advanced courses at the college and receive additional certifications and degrees that correspond with higher-paying jobs. **Figure 3** summarizes the I-BEST programs at each PACE-participating college. It includes details on the length of the program, the courses that comprise the various certificates, the number of credits the students obtain over the course of their studies, the certificates students receive, and examples of additional certificates and degrees students can obtain following completion of the program.

As noted earlier, a unique feature of the I-BEST curriculum is that students enroll in basic skills and credit-bearing occupational courses concurrently rather than sequentially. Separate basic skills and occupational faculty team-teach a number of classes. Basic skills instructors use concepts from students' occupational coursework as a vehicle for building basic academic skills, customizing the content and instructional delivery to draw on examples from occupational content. I-BEST requires that the basic skills instructors be present in the occupational skills classes at least 50 percent of the time. The specific team-taught courses are indicated in italics in **Figure 3**.

The I-BEST instructional teams have discretion over how they integrate the basic skills and occupational material. In some cases, the team-teaching approach allows the occupational instructor to focus on course content while the basic skills instructor supports the underlying basic skills needs of the students. For example, the basic skills instructor may take time during the occupational class to teach a mathematical concept, such as graph reading, which is taught in the context of the occupational information being addressed in the class. Alternatively, the basic skills instructor will ask probing questions about a complex topic to ensure that the occupational instructor has fully explained it. In other cases, the two instructors function as a team, integrating basic skills and occupational content within a participatory adult learning environment.

For example, in the EvCC Sustainable Office Skills (SOS) class, students may practice their PowerPoint skills by making a presentation to the class on green office procedures and learn how to provide constructive feedback to one another. In some classes, both the basic skills and occupational skills instructors will lecture during the occupational skills class, with the instructor who is not lecturing taking notes on a whiteboard to demonstrate note-taking skills.

In addition to supporting the occupational skills instructor, the basic skills instructor teaches a separate class that integrates occupational content with basic skills by using assignments and lessons that employ tools and concepts similar to those used by the occupational instructor. This includes teaching reading comprehension and writing skills using content from the occupational class. For the electrical, welding, and automotive programs at BTC, the basic skills instructor supports students in the required college-level math courses. The basic skills instructor also addresses study skills, such as note-taking and homework completion. At EvCC, the welding and NAC programs include a pre-I-BEST class the quarter before a student starts the occupational skills class. Taught by the basic skills instructor, this class focuses on introducing the concepts students will work on in the occupational skills class, with a heavier emphasis on building the basic skills required to succeed in the occupational skills class. Additionally, these classes include trips to labs or clinical sites and initial conversations about the education and career options available following completion of the short-term certificate program.

The I-BEST programs also include labs and internships to support occupational learning. Welding and electrical programs include extensive lab time to practice skills and apply classroom concepts. The basic skills instructor is often present during labs to provide additional assistance. In welding, students may earn multiple skill certificates based on their work. Nursing assistant students complete a three-and-a-half week clinical component during which they work for 48 hours at a nursing home. In EvCC's Sustainable Office Skills class, instructors help students find unpaid internships where they can practice their skills and gain work experience.

The I-BEST teaching teams typically meet before the college quarter begins to review the key concepts and learning goals for the course. The colleges strive to keep teaching teams intact for multiple quarters to maintain continuity and to build upon the subject area expertise that the I-BEST basic skills instructors develop over time.

### **Academic and Nonacademic Supports**

The primary I-BEST supports are advising and financial assistance.

*Advising.* I-BEST students receive academic and career support from a dedicated advisor. The advisor is the primary point of contact throughout the students' participation in the I-BEST portion of the occupational training program. There are no mandatory meetings; instead, the advisor is available on an as-needed basis. The advisor assists students with academic issues, such as navigating the courses required for specific certificates and degrees; provides guidance on career and employment-

Figure 3: I-BEST Programs in PACE

I-BEST Program Length	Classes ( <i>team taught in italics</i> )	Credits and Certification (if applicable)	Examples of Next Step(s) on Pathway
Bellingham Technical College			
Automotive One quarter	<ul style="list-style-type: none"> <li>✓ <i>Transportation Services and Systems</i></li> <li>✓ <i>Occupational Math</i></li> <li>✓ Basic Academic Skills</li> </ul>	23 Credits Vehicle Service Technician Certificate	<ul style="list-style-type: none"> <li>✓ General Automotive Repair Certificate</li> <li>✓ Associate in Applied Science Degree in Automotive Technology</li> </ul>
Electrical One quarter	<ul style="list-style-type: none"> <li>✓ <i>Trade Safety</i></li> <li>✓ <i>Direct Current (DC) Circuits (including lab)</i></li> <li>✓ <i>Electrical Drawings and Blueprints</i></li> <li>✓ <i>Applied Mechanics</i></li> <li>✓ <i>Occupational Math</i></li> <li>✓ Basic Academic Skills—Math</li> <li>✓ Basic Academic Skills—Electrical</li> </ul>	25 Credits	<ul style="list-style-type: none"> <li>✓ Electrician Construction Certificate</li> <li>✓ Associate in Applied Science</li> </ul>
Nursing Assistant Certified One quarter	<ul style="list-style-type: none"> <li>✓ <i>Nursing Assistant Essentials</i></li> <li>✓ Nursing Assistant clinical placement</li> <li>✓ Basic Academic Skills</li> <li>✓ One day courses in CPR and HIV/AIDS</li> </ul>	12.5 Credits Nursing Assistant Certification (requires passing state exam)	<ul style="list-style-type: none"> <li>✓ Phlebotomy</li> <li>✓ Medical Coding</li> <li>✓ Dental Assisting</li> </ul>
Welding Two quarters	<ul style="list-style-type: none"> <li>✓ <i>Welding Safety I and II</i></li> <li>✓ <i>Shielded Metal Arc Welding</i></li> <li>✓ <i>Thermal Cutting</i></li> <li>✓ <i>Gas Metal Arc Welding</i></li> <li>✓ <i>Occupational Math</i></li> <li>✓ Career Opportunities for Welders and College Success Foundations</li> <li>✓ Basic Academic Skills (one per quarter)</li> </ul>	25 Credits Washington Association of Building Officials (WABO) Certification (requires passing certification exams)	<ul style="list-style-type: none"> <li>✓ Basic Industrial Welding Skills Certificate</li> <li>✓ Associate in Applied Science in Welding Technology</li> </ul>
Everett Community College			
Welding One quarter plus ESL/ABE pre-program quarter	<ul style="list-style-type: none"> <li>✓ Pre-I-BEST class</li> <li>✓ <i>Sustainable Industrial Standards for Welding</i></li> <li>✓ <i>Advanced Arc</i></li> <li>✓ <i>Gas Metal Arc/Flux Cord Arc Welding</i></li> <li>✓ I-BEST Basic Skills class</li> </ul>	12 Credits (pre-program) 16 Credits (program) WABO Certification (requires passing certification exams)	<ul style="list-style-type: none"> <li>✓ Advanced Tungsten Inert Gas Welding</li> <li>✓ Aerospace Fabrication &amp; Welding Certificate</li> <li>✓ Associate in Technical Arts Degree, Welding</li> </ul>
Sustainable Office Skills Two quarters	<ul style="list-style-type: none"> <li>✓ Beginning Keyboarding</li> <li>✓ <i>Computer Literacy</i></li> <li>✓ <i>Sustainable Office</i></li> <li>✓ <i>Job Readiness</i></li> <li>✓ <i>Cooperative Work Experience</i></li> </ul>	19 Credits Sustainable Office Certificate	<ul style="list-style-type: none"> <li>✓ Legal Office Support Certificate</li> <li>✓ Medical Administrative Certificate</li> <li>✓ Associate in Technical Arts Degree</li> </ul>

I-BEST Program Length	Classes ( <i>team taught in italics</i> )	Credits and Certification (if applicable)	Examples of Next Step(s) on Pathway
Nursing Assistant Certified One quarter plus ESL/ABE pre-program quarter	<ul style="list-style-type: none"> <li>✓ Pre-I-BEST class</li> <li>✓ <i>Nursing 101</i></li> <li>✓ I-BEST Basic Skills class</li> </ul>	16 Credits (pre-program) 18 Credits (program) Nursing Assistant Certification (requires passing state exam)	<ul style="list-style-type: none"> <li>✓ Phlebotomy Technician Certificate</li> <li>✓ Associate in Applied Science–Medical Assisting</li> </ul>
Whatcom Community College			
Clerical Assistant Two to three quarters	<ul style="list-style-type: none"> <li>✓ <i>Introduction to Business Computing</i></li> <li>✓ <i>Office Procedures</i></li> <li>✓ <i>Introduction to Accounting</i></li> <li>✓ <i>Customer Service for Professionalism</i></li> <li>✓ Mediated Labs in Accounting, Business Computing, and Office Administration <sup>14</sup></li> <li>✓ Basic Academic Skills (one per quarter)</li> </ul>	28 Credits Clerical Assistant Certificate of Proficiency	<ul style="list-style-type: none"> <li>✓ Accounting Certificate</li> <li>✓ Hospitality and Tourism Business Management Certificate</li> <li>✓ Associate in Science–Business Administration</li> </ul>

related issues; and refers students to partner organizations for supportive services. The advisor makes classroom visits to meet with students and schedules one-on-one sessions as issues arise. I-BEST students can also access the supports available at the college, including tutoring, general academic advisors, and content instructors. The basic skills instructors also advise students and can refer students to the I-BEST advisor to address more substantial academic and nonacademic issues.

*Financial Assistance.* I-BEST advisors help students secure financial assistance during the enrollment process by helping them complete the Free Application for Federal Student Aid (FAFSA) form and by identifying available tuition assistance resources, such as Pell Grants and the Washington State Opportunity Grants program. If funding from these sources is not available, the I-BEST programs, using PACE funding<sup>15</sup>, will cover tuition costs for the

quarters that are part of I-BEST. In addition, the I-BEST program uses PACE funds to cover costs associated with books, tools, and other course materials.

### Connecting Participants to Employers

While I-BEST requires that the occupational programs be in locally in-demand fields, it does not have a specific employment services component. Colleges' applications to the state board for approval of their I-BEST programs must include regional labor market information showing that program graduates will earn a minimum wage of \$13 per hour<sup>16</sup>. Additionally, the proposal must provide evidence that local businesses, labor, and other community stakeholders support the proposed program<sup>17</sup>. Although some instructors take students to meet employers or to visit work sites, this is not a required component. The exception is the Nursing

Assistant Certified program, in which students' clinical placements can lead to employment after students have completed I-BEST and passed the certification exam.

Participants who wish to transition to employment at any point on the pathway can access services at college career centers. Additionally, many instructors have relationships with employers and assist students with their job search.

### Comparison to Other Offerings

In the absence of the I-BEST program, individuals would likely take standard college offerings. Students whose basic skills levels are insufficient to qualify for college-level courses would have to raise their skills through basic education classes before enrolling in

college-level coursework. Students who do meet the basic skills level requirements for college courses but have difficulties would not receive basic skills instruction as part of occupational training. None of these students would have access to the basic skills support, advising, and extra financial support offered by the I-BEST program. **Figure 4** illustrates the key differences in instruction and services available to I-BEST students compared with those who enroll in other offerings at the colleges.

### Summary

The BTC, EvCC, and WCC I-BEST programs in PACE include several key career pathways framework components. I-BEST aims to improve students' academic

**Figure 4: Comparison of I-BEST Programs and Other College Offerings**

Career Pathways Component	I-BEST Program	Standard Program and Services at Colleges
Assessment	<ul style="list-style-type: none"> <li>CASAS test</li> </ul>	<ul style="list-style-type: none"> <li>ACCUPLACER or COMPASS® test <sup>18</sup></li> </ul>
Curriculum	<ul style="list-style-type: none"> <li>Entry into college-level occupational training programs at lower skill levels than allowed by standard eligibility criteria</li> <li>Occupational training courses that are team-taught by occupational and basic skills instructors</li> <li>Separate basic skills classes to support training curriculum</li> </ul>	<ul style="list-style-type: none"> <li>Coursework to increase basic skills prior to entry in college-level occupational training programs</li> <li>Basic skills instruction not linked to occupational training courses</li> <li>Progression to training courses without basic skills enhancements</li> </ul>
Support Services	<ul style="list-style-type: none"> <li>Academic advising provided by dedicated I-BEST advisor</li> <li>Guidance on available financial resources and assistance in applying</li> <li>Supplemental tuition assistance if standard financial aid not available</li> <li>Financial support for books, tools, and supplies</li> <li>Access to standard college support services such as tutoring and the career center</li> </ul>	<ul style="list-style-type: none"> <li>Standard federal and state financial aid, without guidance</li> <li>Access to standard college support services, such as tutoring, and the career center</li> </ul>
Employment Connections	<ul style="list-style-type: none"> <li>Informal staff connections to local industry</li> <li>College career center</li> </ul>	<ul style="list-style-type: none"> <li>Informal staff connections to local industry</li> <li>College career center</li> </ul>

and occupational skills, prepare them to earn one or more post-secondary credentials, and ultimately secure an in-demand job. Signature I-BEST components are:

- Accelerated entry into college-level occupational training credential programs for those with skill levels too low to meet entry requirements. Students take basic and occupational skills classes concurrently.
- Integrated basic skills and occupation training instruction. Instructors overlap at least 50 percent of the time, allowing students to build knowledge about the industry while increasing their basic skills.
- Exposure to work environments through labs, internships and clinical placements.
- A range of academic and non-academic supports to help students persist in their programs.

For additional information, go to:

State Board for Community and Technical Colleges: <http://www.sbctc.ctc.edu/college/e-integratedbasiceducationandskillstraining.aspx>

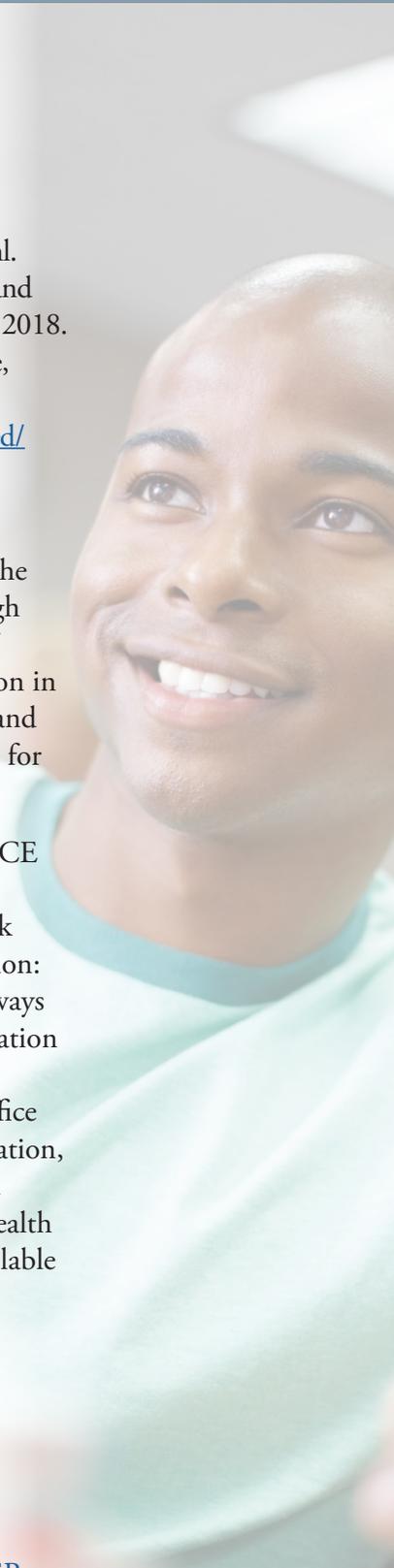
Bellingham Technical College: <http://www.btc.ctc.edu/DegreesClasses/BasicSkills/IBest.aspx>

Everett Community College: <http://www.everettcc.edu/programs/academic-resources/basic-dev-ed/ibest>

Whatcom Community College: <http://www.whatcom.ctc.edu/index.php/degrees-and-programs/special-programs/ibest-program/>

## Endnotes

1. A. Carnevale, N. Smith, & J. Strohl. Help Wanted: Projections of Jobs and Education Requirements Through 2018. Georgetown Public Policy Institute, 2010. Retrieved from <https://cew.georgetown.edu/report/help-wanted/>
2. BTC, EvCC, and WCC receive support from the Open Society Foundations. The evaluation of the colleges' I-BEST program through PACE is funded by the Office of Planning, Research and Evaluation in the U.S. Department of Health and Human Services' Administration for Children and Families (ACF).
3. For more information on the PACE framework, see David J. Fein. "Career Pathways as a Framework for Program Design and Evaluation: A Working Paper from the Pathways for Advancing Careers and Education (PACE) Project." OPRE Report #2012-30, Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, 2010. Available at [www.career-pathways.org](http://www.career-pathways.org).
4. <http://www.btc.ctc.edu>
5. <http://www.everettcc.edu/>
6. <http://www.whatcom.ctc.edu/>
7. I-BEST Fact Sheet. [http://www.sbctc.ctc.edu/college/abepds/WEB\\_IBESTone-pager\\_11.5.12.pdf](http://www.sbctc.ctc.edu/college/abepds/WEB_IBESTone-pager_11.5.12.pdf)



8. WCC includes only one of its I-BEST programs in PACE. The others were smaller programs with more limited demand (Nursing Assistant) or longer-term programs not open to random assignment (Medical Assistant). BTC and EvCC included all occupational I-BEST programs in PACE.
9. Funding from the Open Society Foundations is available to fill in the gap to cover tuition costs.
10. BTC and WCC use the ACCUPLACER. EvCC uses COMPASS.
11. J. Wachen, , D. Jenkins, and M. Van Noy. "How I-BEST Works: Findings from a Field Study of Washington State's Integrated Basic Education and Skills Training Program." Community College Research Center, 2010.
12. Additionally, BTC views I-BEST as a necessary support structure for students who have ACCUPLACER scores at the low end of the eligibility range. BTC is beginning to recruit I-BEST participants from students whose ACCUPLACER scores do meet the criteria for enrollment in occupational courses, but are at the low end of the range. These students are asked to take the CASAS assessment. If they are eligible for I-BEST based on their CASAS scores, they are strongly encouraged to enroll, rather than matriculating directly into their college program.
13. CASAS is a competency-based assessment tool that seeks to provide "an accurate measurement of real-life skills vital to success in the workplace and the classroom." <https://www.casas.org/docs/pagecontents/whatiscasas.pdf>
14. Mediated labs are self-directed computer lab courses that allow students to choose from an array of courses in a lab setting with an instructor and teaching assistants, who are available to provide support and review work. The class is semi-structured with quiz and test dates set by the instructor.
15. PACE received a generous grant from the Open Society Foundations to help I-BEST programs scale up for the study, including providing tuition support to students.
16. The I-BEST wage requirement for King County (where Seattle is located) is \$15 per hour. Programs in Early Childhood Education (ECE) are exempted from this requirement (no ECE programs are included in PACE).
17. <http://www.sbctc.ctc.edu/college/abe/IA31-BESTProf-TechandExpansionGuidlines.pdf>
18. WCC also requires students to take a college-specific math test.

### Box 1: Overview of the PACE Evaluation

The Pathways for Advancing Careers and Education (PACE) evaluation, a 10-year effort funded by the Office of Planning, Research and Evaluation in the U.S. Department of Health and Human Services' Administration for Children and Families (ACF) and led by Abt Associates Inc., is a random assignment evaluation of nine promising career pathways programs that aim to improve employment and self-sufficiency outcomes for low-income, low-skilled individuals. The goal is to produce methodologically rigorous evidence of the effectiveness of career pathways approaches that will address issues of interest to federal, state, and local policy makers and practitioners and have significant influence on policy and practice. PACE will include implementation, impact, and cost-benefit studies. Key study questions include

- What is the impact of each program on higher levels and quicker achievement of certificates and degrees? On earnings?
- What are the impacts of each program on individual and family well-being?
- Do impacts vary by subgroups, and, if so, which characteristics are associated with larger or smaller effects?

PACE was launched in late 2007 and began with intensive outreach to solicit the views of policymakers, program operators, researchers and advocates on promising program areas to test, resulting in a focus on the career pathways approach. The evaluation team then recruited strong career pathways programs into the study. Random assignment began in November 2011 and will conclude in September 2014.

The nine PACE Partner Sites are: Instituto del Progreso Latino, Des Moines Area Community College, Madison Area Technical College, Pima Community College, San Diego Workforce Partnership, Valley Initiative for Development and Advancement, the Washington I-BEST program in Bellingham Technical College, Everett Community College and Whatcom Community College, Workforce Development Council of Seattle-King County, and Year Up. An important partner in the study is the Open Society Foundations (OSF), which provided resources for many of the programs in the PACE evaluation to expand their scale to meet the requirements of the evaluation, to enhance services in specific areas, or both. Support was also provided to specific sites by The Joyce Foundation and Kresge Foundation.

Data collection activities include two rounds of implementation research visits, two follow-up surveys with individuals in the study, and acquisition of site-specific and national administrative records on education and employment-related outcomes. The evaluation team will produce a series of reports including: program profiles for each of the PACE partner sites, site-specific implementation reports documenting the operation of the program, and site-specific impact reports examining the effect of the program on education, employment, and other related outcomes, including a cost-benefit analysis.

The PACE team includes:

#### Primary Evaluation Sponsor

The Office of Planning, Research and Evaluation (OPRE), Administration for Children and Families, U.S. Department of Health and Human Services

<http://www.acf.hhs.gov/programs/opre/research/project/pathways-for-advancing-careers-and-education>

#### Other Project Sponsors

Foundations and federal agencies have provided generous grants to support programs in PACE including:

The Open Society Foundation's Special Fund for Poverty Alleviation : [www.soros.org](http://www.soros.org)

The Joyce Foundation [www.joycefdn.org](http://www.joycefdn.org)

The Kresge Foundation [www.kresge.org/](http://www.kresge.org/)

Health Professions Opportunity Grants, Administration for Children and Families <http://www.acf.hhs.gov/programs/ofa/programs/hpog>

#### Lead Evaluator

Abt Associates Inc. [www.abtassociates.com](http://www.abtassociates.com)

#### Evaluation Partners

MEF Associates [www.mefassociates.com](http://www.mefassociates.com)

American Public Human Services Association [www.aphsa.org](http://www.aphsa.org)

National Conference of State Legislatures [www.ncsl.org](http://www.ncsl.org)

National Governors Association [www.nga.org](http://www.nga.org)





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