

Research Report No. 05-2

Washington State Board for Community and
Technical Colleges

I-BEST: A PROGRAM INTEGRATING ADULT BASIC EDUCATION AND WORKFORCE TRAINING

December 2005

OVERVIEW

Two-year colleges are the major gateway for education and training for low-skilled adults. Many start in adult basic and English as a Second language education classes. A review of Washington state and national research of ESL students indicates that relatively few students transition to workforce training. If they do transition, it is typically to training for jobs on the lowest rung on the ladder with few advancing beyond to higher wage and higher skill jobs. The training they receive is often not aligned in pathways, but based upon a patchwork of credit and non-credit courses. The longer it takes to master basic skills, the less likely adults are to advance from one stage to the next. It is critical to find ways to accelerate learning to prepare low-skilled adults for work and to increase their contributions to Washington state's economy while increasing their capacity for obtaining higher wage positions and career advancement.

What is I-BEST?

Integrated Basic Education and Skills Training (I-BEST) pairs English as a second language (ESL)/adult basic education (ABE) instructors and professional-technical instructors in the classroom to concurrently provide students with literacy education and workforce skills. In spring 2004, the State Board for Community and Technical Colleges' Offices for Adult Basic Education and Workforce Education (SBCTC) began 10 innovative demonstration I-BEST projects that tested traditional notions that students must first complete all levels of basic education before they can begin workforce training. All of the projects focused on ESL education.



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What can be learned from the I-BEST demonstration?

I-BEST students earned five times more college credits on average and were 15 times more likely to complete workforce training than were traditional ESL students during the same amount of time. I-BEST programs increased the access to workforce training for ESL students. The students saw the opportunity to gain skills for higher paying jobs and they took it.

ESL education is instrumental in two major ways. First, it provides just the right level of education in just the right amount for students to succeed in workforce training. The ESL curriculum is tailored to language that will be needed to learn and do the job for which the student is training. Second, ESL lays groundwork for students who continue on in training or who come back for additional training after they go to work. Colleges that embraced this rigorous model made substantial use of assessment and in some cases used additional standalone vocational ESL education classes to support the I-BEST program. After I-BEST, students will have a continuing need for ESL support to develop their English language skills. This is neither surprising, nor defeating. I-BEST showed that ESL and workforce education can be offered together. Colleges will need to identify which ABE/ESL/Developmental components are needed for subsequent levels of training, including ESL for students who “test out” of ABE/ESL federal level of support.

Making I-BEST work takes considerable planning and coordination before, during and after students step into the classroom. Administrators from workforce training and basic skills must work closely together. Significant planning time is needed between administrators and faculty. Faculty planning needs to be on-going for curriculum development/revision, student assessment and feedback. When I-BEST is part of a longer educational pathway for students, this planning and coordination needs to extend well into the program.

The unique instructional mode and support services are the two critical components identified in the cost structure of the I-BEST demonstrations. The instruction component is based on the presence of two faculty members in the classroom. Coordination is based upon work within the college and with external student support agencies.

The existing workforce program approval process needs to be slightly adapted in order to bring I-BEST to scale throughout the state. Colleges need to be allowed to add I-BEST education options (ABE and ESL) to workforce education programs that are already approved for one year or longer certificate and degrees or programs that result in high wage employment.

INTEGRATED BASIC EDUCATION AND SKILLS TRAINING

I-BEST: A Program Integrating Adult Basic Education and Workforce Training

What is I-BEST?

Integrated Basic Education and Skills Training (I-BEST) pairs English as a second language (ESL)/adult basic education (ABE) instructors and professional-technical instructors in the classroom to concurrently provide students with literacy education and workforce skills. In spring 2004, the State Board for Community and Technical Colleges' Adult Basic Education and Workforce Education offices (SBCTC) began 10 innovative demonstration projects. The I-BEST demonstration programs tested traditional notions that students must first pursue basic education before they can begin workforce training. With a focus on re-designing ESL education, colleges shifted from the traditional focus of primarily teaching ESL in the context of family and citizenship to teaching students how to learn language and college study skills within the context of and along with workforce education in the student's chosen occupation. The workforce education content was the context for learning, practicing and mastering English. The focus on communication skills was no longer on the social aspects of a student's life, which has traditionally been the focus of ESL instruction. Instead, it focused on work with specific language competencies for application in an employment environment (i.e., communication with the employer and co-workers, and occupation-specific language).

Why is it important to the state's economy to create pathways to success in the workforce for non-English speaking adults?

Washington state is becoming increasingly diverse. One significant change is the growth in the non-English speaking population. Between 1990 and 2000, the non-English speaking adult population more than doubled from 117,000 to 261,000. The ability of employers to remain competitive in a global economy is increasingly dependent upon the educational system's ability to produce skilled workers. An important component of this future workforce is the immigrant population. The influx of non-English speaking adults into the workforce has already begun to create an increased demand for English language instruction concurrent with the occupational skill training. I-BEST helps to meet employer demands for highly skilled workers and their needs for a multi-lingual workforce. Furthermore, in order to achieve greater success in the workforce, non-English speakers need to acquire greater command of English, coupled with increasing education and training necessary for higher wage and higher skill jobs.

The two-year college system is the major provider for both adult basic education (which includes ESL, ABE and GED instruction) and workforce training. Traditionally, basic skills and workforce instruction have been offered separately and sequentially with minimal, if any, linkages. Students start in ESL and at some point in time transition to workforce training courses and programs. Only 10 in 100 ESL students makes this transition within three years and just two in every 100 students starting in ESL go on to earn certificates or degrees within five years. For too many, the pathway is long and not well-mapped. The educational pathway for students stops when non-credit courses do not articulate to certificate and degree programs. When it

becomes too long or too disconnected from their end goals, students who are more likely to see themselves first as workers and parents do not persist (Adelman 2005¹).

Research on Washington state's community and technical college student population found there is a significant economic gain when students reach a certain level of training. Research shows that one year of college level credit plus a credential made the biggest difference or "tipping point" in earnings after leaving college. ESL students who reached this point or beyond earned \$7,000 more per year than ESL students who were unable to reach the one year tipping point in their post-secondary education and training (Prince and Jenkins, 2005²). Programs should be designed to reach this goal.

LESSONS FROM THE I-BEST DEMONSTRATIONS

This section describes the training results from the I-BEST demonstrations. The results are based upon site visits to all 10 demonstration programs and student outcomes for the 268 I-BEST students. For purposes of evaluation, I-BEST's students were compared to 1,425 other ESL students level in the same institutions who were level 3 or higher ESL proficiency and who were attending for employment or further education and training. A summary of findings is presented below:

1. Demonstration projects uniformly focused I-BEST training on higher skill ESL students as those most ready to benefit. I-BEST students had English language proficiency at levels three and higher in the state's six-level competency system, with the average student starting at ESL level four. The typical I-BEST student was able to read at a level that allowed him/her to interpret job training and employment materials on familiar topics, and listen at a level that allowed him/her to comprehend familiar contexts and situations.
2. On average, I-BEST students were five times more likely to earn college credits and 15 times more likely to complete workforce training than were traditional ESL students during the same amount of time. I-BEST provided ESL students the opportunity to see that workforce training is attainable. They saw the opportunity and they took it.
3. Of the 10 I-BEST programs, three developed pathways that were linked to further education and training. These programs were part of pathways long enough to reach the "tipping point" of one year of college level credit plus a college credential. Two of these demonstration programs were strongly connected to these longer pathways. The third was moderately linked. Two others focused on training for a higher wage job, although they were not part of a longer pathway. Of the remaining programs, the I-BEST training was weakly linked to or had no connection to further training after completing the I-BEST program. The credits earned in these programs had varying applicability to degrees and/or longer workforce training programs.

¹ Clifford Adelman, *Moving Into Town—and Moving On: The Community College in the Lives of Traditional-age Students*, U.S. Department of Education Office of Vocational and Adult Education, 2005, page 26-27

² David Prince and Davis Jenkins, *Building Pathways to Success for Low-Skill Adult Students: Lessons for Community College Policy and Practice from a Statewide Longitudinal Tracking Study*, Community College Research Center Teachers College, Columbia University, April 2005, page 15

4. I-BEST students as a whole made English skills gains at the same rate as students in traditional ESL classes. It is difficult to directly compare the I-BEST students to traditional ESL students in this area because I-BEST's English language education centered on the workforce training area, and was more specialized than the general English skills measured in the CASAS language test administered for pre and post testing. Colleges that made greater use of assessment and more formally integrated ESL into the curriculum (and in cases also utilized supplemental vocational ESL classes) demonstrated greater gains. This finding suggests that planning should include a rigorous role for ESL and that the importance of ESL proficiency should be balanced with the acquisition of job skills with the purpose of learning just enough English to do the job.

Who were the I-BEST students?

English language proficiency was a key factor in selecting the 268 students who participated in I-BEST. Programs uniformly reported that I-BEST was not suitable for low-level ESL students. While exceptions were made on an individual case basis for students who seemed extremely motivated, the typical I-BEST student was an ESL level three or higher in the Washington State Competency System, with the average student being an ESL level four student. The student's reading ability allowed him/her to read and interpret simple charts, graphs and labels with students at the upper end able to read academic materials at a secondary reading level. The student's listening skills satisfied basic social demands, following directions in familiar contexts, and easily understanding learned phrases and new phrases containing familiar vocabulary.

How was the comparison group selected?

In order to understand I-BEST results relative to those of traditional ESL classes, a comparison group of 1,425 traditional ESL students was selected. The students started at about the same level of English language proficiency as the I-BEST students. The comparison students identified their ESL program goals as attending for work or for further education and training.

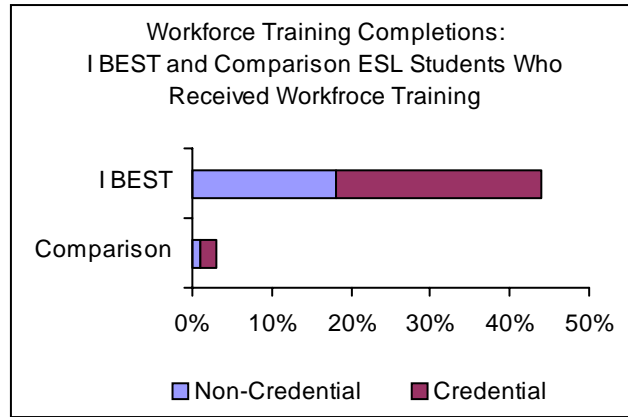
The next several sections describe the workforce training and ESL results after I-BEST training. Aggregate results for the 10 I-BEST programs are shown. Individual college demonstration results are presented in Appendix A.

Workforce training results.

Workforce training outcomes are described in terms of completions and credits earned. Employment outcomes for the I-BEST students will not be available until fall 2006, due to the time lag for employment record reporting.

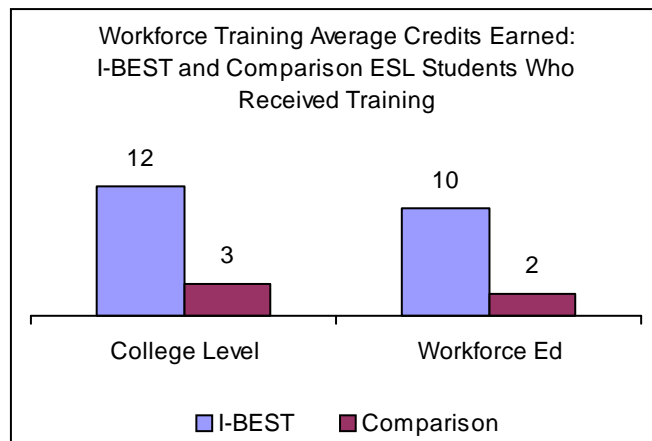
What percent of I-BEST students completed workforce training?

Completions include all students who earned workforce certificates (credentials) as well as others who attained (non-credential) skills levels recognized by the institution as a completion point. An exit point is a stopping out point for training directly tied to employment. On average, I-BEST students were 15 times more likely to complete their I-BEST skills training than were comparison ESL students. During the I-BEST demonstration period, 44 percent of I-BEST students completed skills training. Twenty-six (26) percent of I-BEST students completed credentialed training and 18 percent reached other recognized skills attainment levels. I-BEST’s 44 percent completions rates are in contrast to just three percent of the comparison group ESL students who concurrently completed workforce training in the same time period. This included one percent who completed non-credentialed programs or coursework and two percent who completed credentialed programs.



How many and what kind of credits did I-BEST students earn?

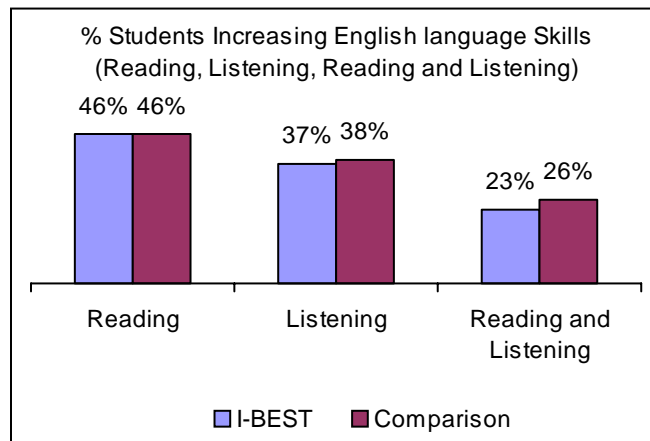
The graph to the right presents the average credits earned by I-BEST and comparison students. Two types of credits are counted: college level and workforce education. Typically, workforce credits are counted as college level. However, colleges may decide to consider their courses below college level. Typically this occurs in a short (one quarter) terminal program that is not in a degree pathway. I-BEST students earned an average of 12 workforce and 10 college level credits. This compared to two workforce credits and three college-level credits earned by comparison students when they were enrolled in workforce training. As stated previously, three I-BEST demonstrations had links to longer training pathways. One of these, licensed practical nursing (LPN) was strongly linked. I-BEST students were considered on the LPN track, which is designed to articulate to an RN degree. Another program, help desk, also provided longer training. The third, early childhood education was moderately linked so that students could challenge credits they earned in I-BEST if and when they continued training in the program toward an Associate degree. Most I-BEST trainings had weak or no direct links to degree or longer programs beyond exploratory career awareness.



As a result of these linkages, the credits earned by I-BEST students vary in applicability to further education and training should they decide to continue. In cases where the demonstrations were strongly or moderately linked, credits were directly applied, or could be challenged if the student advanced in training. In cases where links are weak, I-BEST credits may count as elective credits or may not count at all toward a longer degree program.

What were the English language skills gains for I-BEST?

I-BEST demonstration programs teach the English language in the context of the workforce and employment skills being trained. Traditional ESL classes may also instruct English in the context of life skills. However, most traditional ESL classes teach grammar or rule-based classes with a more academic curriculum. Research shows that teaching English in a context relevant to the adult learner’s interests and goals will increase their learning (Mazzeo, Rab, and Alssid, 2003)³. The graph to the right shows the percentages of I-BEST and comparison traditional ESL students that increased their reading, listening, and both reading and listening skills as the results of I-BEST and traditional ESL instruction. English language gains are measured using the CASAS test for listening and reading. I-BEST students’ language skills gains were similar to comparison students. Hours of English instruction are also similar.



All colleges did not share the aggregate results. Five I-BEST colleges showed higher percentages of students that made dual reading and listening skills gains compared to their traditional students. One I-BEST college showed the same percentage as the comparison colleges. Four showed that traditional ESL students were more likely to make gains. Results were strongest when instruction was intensive and well supported (including in cases that offered a supplemental vocational ESL class); and there was careful and regular assessment of the student for language learning alongside professional-technical skills acquisition.

What are the next steps in English language training after I-BEST?

I-BEST students had average CASAS test scores of 225 in listening and 232 in reading after training. These mid-level scores indicate that while instruction was “just enough” and “just in time” for the training offered, ESL instruction should continue if students continue in their training, and that they may even benefit from workplace ESL should they go to work. As students increase their command of English, their instruction will need to articulate basic studies with ESL that is above the levels that are federally supportable. The operational definition of this is that once students score 245 or higher on CASAS, they are no longer eligible for federal

³ Christopher Mazzeo, Sara Y. Rab, Julian L. Alssid, Building Bridges to College and Careers: Contextualized Basic Skills Programs at Community Colleges, The Workforce Strategy Center, January 2003

basic studies ESL programs. Therefore, they would have to transition to classes that are above the federally supported ESL levels (i.e., federally supported ABE until CASAS test score of 255 or higher and/or developmental English). Colleges should take into consideration an integrated pathway for ESL students who would benefit from the inclusion of ABE reading, writing, and/or math content and further developmental English classes.

BRINGING I-BEST TO SCALE - APPLYING THE LESSONS LEARNED FROM THE DEMONSTRATIONS AND RELATED RESEARCH

This section describes the lessons learned from the demonstration programs and other research, and recommends how to implement and support I-BEST programs more broadly. Lessons from the demonstrations provide practical information for planning and delivery, student recruitment, instruction and assessment. The research indicates that I-BEST programs are valuable first steps along pathways from low skills into and through higher educational attainment and higher wage/higher skill jobs, however, they demonstrate the need to extend support beyond the first steps taken.

Not all colleges that participated shared the aggregate results. Renton Technical College's I-BEST provides a clear pathway up to Licensed Practical Nursing, which articulates to an Associate Degree in Nursing and that can lead to a Bachelor's of Science in Nursing. The program offers classes for college-level credit beginning the first quarter and students are making significant skills gains in both reading and listening, and they are outperforming traditional ESL in both reading and listening. Completion data will not be available until winter 2006. For a description of the Renton Technical College Program see Appendix B.

I-BEST takes considerable planning and coordination before, during and after students step into the classroom.

Administrators from basic skills and workforce training must work closely together. Planning time is needed between administrators and faculty. Faculty planning is on-going for curriculum development/revision, and student assessment/feedback. When I-BEST is the first step of a longer program, this planning and coordination needs to be continued beyond the I-BEST start given the need for further ESL support to students (see Appendix C).

Planning includes coordination with other partners including employers and community organizations.

Program staff stated it was vital that a coordination role is included to help students access much needed services due to the intensity and rigor of the programs. They felt that identifying resources should not be left solely up to the student. There are many issues that interfere with successful student program retention and completion. The college staff can help identify resources in a more coordinated and holistic way. Some of the I-BEST programs have worked on the development of new advising and student support strategies. One college has provided train-the-trainer workshops focusing on integration strategies for both instructional and student support services faculty and staff. The college also has bilingual student assistants to provide support as tutors and mentors to the I-BEST students.

I-BEST is a program with outcomes designed to meet the needs of employers, therefore ESL and workforce training must be given equal consideration. There must be clear student goals and expectations for increasing both ESL/ABE and technical skills.

This is a team effort. ESL balances two needs. The first is to provide just the “right stuff” and just enough of it for the student to learn the English needed for the workforce instruction they were receiving. The second is to provide related instruction for success beyond the classroom. ESL skills gains were largest in programs that rigorously assessed and where the results of the assessment were used to contextualize instruction. Where ESL was not given equal consideration and focused more exclusively on explaining content, skills gains were less. There will be a continuing need for ESL support as students advance in their training. Programs need to plan for this; including bridges from ABE/ESL to developmental education classes and ESL level classes that are above the federally supported levels.

Student recruitment and retention are based in knowing the students’ backgrounds (including prior education and work experiences), interests and proficiency levels, and aligning them with program expectations for intensity and duration.

The workforce and ESL faculty must work together closely to identify proficiency levels needed by students to be successful in the program. They must also work together to identify proficiency levels needed to continue on to next steps along the program pathway. To make I-BEST a first step that is part of a longer program pathway, colleges must assess and plan for prior education, basic education levels and students’ resources to persist, and their students likely needs to fit training into their lives by building in multiple entry and exit points attached to employment opportunities.

I-BEST classroom strategies have applicability to all students.

When the I-BEST ESL portion of the curriculum is designed to instruct and make explicit to both students and workforce instructors the communicative skills and strategies being used, ESL benefits go beyond only being support for learning workforce content. For example, all students benefit when instructors evaluate students’ listening comprehension skills, clarify the language of instruction, impart information through oral, visual, auditory, and kinesthetic learning modalities, and use graphic organizers, such as charts, to make information more accessible. Furthermore, this exposure hastens the integration of I-BEST students into traditional workforce training as workforce instructors incorporate the techniques into their instruction.

Classes that provided instruction to a cohort cited that they had better success in engaging the students in all aspects of the curriculum.

Make strong links to further education and training as well as entry employment.

A review of Washington state and national research of ESL students indicates that relatively few ESL students transition to workforce training, and if they do transition it is typically to training for jobs on the lowest rung on the ladder with few advancing beyond to higher wage and higher skill jobs. The training they receive is often not aligned in pathways, but based upon a patchwork of credit and non-credit courses.

NEXT STEPS

SBCTC is moving into the next phase of bringing I-BEST to scale. This phase includes an operational definition of I-BEST for program design, funding and disseminating I-BEST findings to the system for broader adoption, including planning funding for the 24 colleges that did not participate in the demonstration phase. This section describes these next steps.

Planning for all Colleges.

With the demonstration projects in their final year, the next phase of the initiative will focus on engaging the remaining 24 system colleges in planning through the issuance of planning grants for this academic year in addition to providing training institutes and technical support sharing the I-BEST findings.

I-BEST: An Operational Definition.

I-BEST is primarily a mode of instruction where ABE/ESL and professional-technical faculty both provide instruction together in the classroom contributing to a learning experience for students that results in both literacy and workforce skills gains. Planning brings together campus leaders, instructors, program goals, content, and methodologies from both professional-technical and adult basic education in order to better serve adult learners attending for work in an identified professional-technical field. These students are assessed as meeting the federal criteria for receiving adult basic education (ABE) or English as a Second Language (ESL) instruction. Evaluation includes program administrators and instructors from both areas who share responsibility for shared outcomes, jointly examining and responding to data to measure progress and formulate changes and next steps.

I-BEST programs are to be based on currently-approved professional-technical programs that extend to at least one year of college-level training and incorporate employment stop-in and stop-out (exit) points as part of an approved professional-technical certificate or associate degree program, or result in immediate high wage employment. Once approved, they become part of the college's training inventory as a program option. College credits for I-BEST are transcribed when they are earned. They count toward the longer program credential or otherwise meet a program requirement common to all students.

ESL in I-BEST will also follow rigorous guidelines. In particular, assessment is a critical part of I-BEST for recruitment, progress and post testing. ESL assessments assist I-BEST programs in counseling students. This includes identifying the next steps for increasing language skills when students go to work and when they continue further along with their education and training. Planners should recognize that students will reach a point (CASAS test score of 245 or higher) when there is still a need for additional ESL, however the delivery will change from federal basic studies programs to college developmental level.

I-BEST FTE Reimbursement.

From the beginning, SBCTC and the demonstration projects recognized that the traditional FTE calculation for colleges' reimbursement of state funding did not fit I-BEST's demands for its instructional effort (particularly the cost of two instructors working together). Over the course of the demonstration projects, the project colleges were asked to provide a description of program

effort and an estimate of expenses in the following categories: instructional, curriculum development, student recruitment, support services, goods and services, travel, administration, and other. The two critical components identified in the cost structure of these programs were the presence of two faculty members in the classroom and coordination services. Due to the intensity and duration of instruction, many of the demonstration colleges found that students needed assistance in mitigating external barriers that arose in the course of the program. One of the model I-BEST demonstration projects used a staff member in a dual role of ESL instructor and coordinator. This was cited as a significant element of success in their students' persistence and retention rates for such a rigorous program.

APPENDIX A

I-BEST SUMMARY 2004-2005

TOTAL STUDENTS: I-BEST AND COMPARISON ALONG WITH I-BEST PROGRAM AREAS AND COMPARISON SELECTION CRITERIA

ALL STUDENTS ENROLLED IN 2004-05

I-V

College	I BEST ENROLLED	I-BEST AREA	COMPARISON STUDENTS: ENROLLED ESL 3 OR HIGHER WITH EMPLOYMENT OR EDUCATION GOAL
Bellevue Community College	20	Nursing Assistant	84
Big Bend Community College	29	Commercial Driver	148
Lake Washington Technical College	24	Industrial Mechanics	62
Olympic College	19	Nursing Assistant	56
Renton Technical College	13	Licensed Practical Nurse	422
Shoreline Community College	43	Automotive/Business	271
Skagit Valley College	40	NAC	86
South Seattle Community College	17	Help Desk Operator	98
Tacoma Community College	24	Paraeducator	143
Walla Walla Community College	38	Nursing Assistant, Commercial Driving, Automotive	55
TOTAL STUDENTS	268		1425

I-BEST SUMMARY 2004-2005

ALL VOC COMPLETIONS (INCLUDES EXIT 9) AND VOC CERTIFICATED COMPLETIONS ONLY

College	I BEST ENROLLED	COMPLETIONS	CERTIFICATED COMPLETIONS
Bellevue Community College	20	100%	In progress
Big Bend Community College	29	93%	93%
Lake Washington Technical College	24	0%	0%
Olympic College	19	68%	68%
Renton Technical College	13	In progress	In progress
Shoreline Community College	43	0%	0%
Skagit Valley College	40	58%	5%
South Seattle Community College	17	0%	0%
Tacoma Community College	24	67%	In progress
Walla Walla Community College	38	47%	13%
I BEST PILOTS	268	44%	18%

College	COMPARISON STUDENTS_A45	COMPLETIONS	CERTIFICATED COMPLETIONS
Bellevue Community College	84	0%	0%
Big Bend Community College	148	1%	0%
Lake Washington Technical College	62	5%	5%
Olympic College	56	0%	0%
Renton Technical College	422	2%	2%
Shoreline Community College	271	3%	1%
Skagit Valley College	86	3%	1%
South Seattle Community College	98	7%	0%
Tacoma Community College	143	6%	0%
Walla Walla Community College	55	7%	5%
COMPARISON STUDENTS	1425	3%	1%

I-BEST SUMMARY 2004-2005

I-BEST STUDENTS: COLLEGE LEVEL, VOCATIONAL AND DEVELOPMENTAL CREDITS

College	I BEST ENROLLED	AVG TOTAL COLLEGE CREDITS ATTEMPTED	AVG TOTAL COLLEGE CREDITS EARNED	AVG VOC CRED ATTEMPTED	AVG VOC CRED EARNED	NON-TRANSCRIPTED VOC CREDITS	DEV ED
Bellevue Community College	20	0	0	0	0		
Big Bend Community College	29	0	0	17	15		
Lake Washington Technical College	24	45	44	44	43		2
Olympic College	19	10	9	9	8		
Renton Technical College	13	28	35	25	32		
Shoreline Community College	43	3	2	1	1		
Skagit Valley College	40	9	8	9	8		5
South Seattle Community College	17	10	9	11	10	25	
Tacoma Community College	24	0	0	0	0	6	
Walla Walla Community College	38	14	12	20	17	1	0
I BEST PILOTS	268	11	10	13	12	3	1

A-3

I-BEST SUMMARY 2004-2005

COMPARISON STUDENTS: COLLEGE LEVEL, VOCATIONAL AND DEVELOPMENTAL CREDITS

College	COMPARISON STUDENTS	AVG TOTAL COLLEGE CREDITS ATTEMPTED	AVG TOTAL COLLEGE CREDITS EARNED	AVG VOC CRED ATTEMPTED	AVG VOC CRED EARNED	NON-TRANSCRIPTED VOC CREDITS	DEV ED
Bellevue Community College	84	2.4	2.0	1.7	1.5		
Big Bend Community College	148	0.9	0.8	1.2	1.1		
Lake Washington Technical College	62	7.2	6.4	5.8	5.1		0.3
Olympic College	56	2.1	2.1	1.4	1.4		
Renton Technical College	422	3.9	3.4	3.7	3.3		
Shoreline Community College	271	1.8	1.7	0.9	0.8		0.3
Skagit Valley College	86	2.0	1.8	1.9	1.8		0.5
South Seattle Community College	98	3.8	3.8	5.4	5.4	1.7	
Tacoma Community College	143	1.2	1.0	0.3	0.3		
Walla Walla Community College	55	2.8	2.1	3.1	2.4	0.1	0.7
COMPARISON STUDENTS	1,425	2.7	2.4	2.5	2.2	0.6	0.6

I-BEST SUMMARY 2004-2005

I BEST PILOTS AND COMPARISON STUDENTS BASIC SKILLS GAINS

College	I BEST ENROLLED	MADE READING GAIN	MADE LISTENING GAIN	GAINED IN BOTH AREAS
Bellevue Community College	20	55%	40%	20%
Big Bend Community College	29	48%	52%	34%
Lake Washington Technical College	24	25%	4%	0%
Olympic College	19	58%	63%	47%
Renton Technical College	13	57%	57%	43%
Shoreline Community College	43	51%	53%	30%
Skagit Valley College	40	50%	33%	20%
South Seattle Community College	17	35%	0%	0%
Tacoma Community College	24	67%	54%	42%
Walla Walla Community College	38	24%	16%	5%
I BEST PILOTS	268	46%	37%	23%

College	COMPARISON: ENROLLED ESL 3 OR HIGHER WITH EMPLOYMENT OR EDUCATION GOAL	MADE READING GAIN	MADE LISTENING GAIN	GAINED IN BOTH AREAS
Bellevue Community College	84	60%	50%	40%
Big Bend Community College	148	39%	26%	18%
Lake Washington Technical College	62	52%	31%	26%
Olympic College	56	36%	48%	20%
Renton Technical College	422	50%	40%	29%
Shoreline Community College	271	55%	45%	30%
Skagit Valley College	86	22%	24%	15%
South Seattle Community College	98	32%	26%	14%
Tacoma Community College	143	44%	41%	29%
Walla Walla Community College	55	31%	35%	20%
COMPARISON STUDENTS	1,425	46%	38%	26%

I-BEST SUMMARY 2004-2005

I BEST PILOTS AND COMPARISON STUDENTS PRE AND POST CASAS SCORES

I-BEST PILOT CASAS	LISTENING_PRE	LISTENING_POST	READING_PRE	READING_POST
Bellevue Community College	223	222	232	234
Big Bend Community College	214	224	216	224
Lake Washington Technical College	212	207	213	223
Olympic College	225	235	235	236
Renton Technical College	225	237	236	246
Shoreline Community College	217	225	227	231
Skagit Valley College	227	229	233	238
South Seattle Community College	216	210	229	225
Tacoma Community College	219	229	229	232
Walla Walla Community College	212	215	224	223
I BEST PILOTS	219	225	227	232

COMPARISON STUDENT CASAS	LISTENING_PRE	LISTENING_POST	READING_PRE	READING_POST
Bellevue Community College	220	228	228	231
Big Bend Community College	209	213	209	220
Lake Washington Technical College	223	228	229	234
Olympic College	218	219	220	225
Renton Technical College	214	219	221	226
Shoreline Community College	218	223	218	227
Skagit Valley College	221	227	225	231
South Seattle Community College	219	222	224	229
Tacoma Community College	219	222	228	231
Walla Walla Community College	216	222	220	226
COMPARISON STUDENTS	216	221	222	228

I-BEST SUMMARY 2004-2005
I BEST PILOTS
COMPLETION AWARD TYPE, TITLE AND NUMBER OF AWARDS
(Only Counts Awards Coded in Degree Table)

COLLEGE	TITLE	DEGREE_TITLE	TOTAL AWARDS
Big Bend Community College	Certificate, < 45 credits or 900 hours	Comm Drivers License Completer	27
Olympic College	Certificate, < 45 credits or 900 hours	Cert/Rec:Nursing Assistant	13
Skagit Valley College	Certificate, 45-89 credits or 900-1799 hours	Cert Practical Nursing	2
Skagit Valley College	GED Certificate	GED	1
Skagit Valley College	Non-Degree/Non-Certificate Award	Cert Nursing Assistant	21
Tacoma Community College	Non-Degree/Non-Certificate Award		16
Walla Walla Community College	AA Degree	Auto Body Repair Technology	1
Walla Walla Community College	AA Degree	Cosmetology	1
Walla Walla Community College	Certificate, < 45 credits or 900 hours	Commercial Truck Driving	2
Walla Walla Community College	Certificate, 45-89 credits or 900-1799 hours	Auto Body Tech Certificate	1
Walla Walla Community College	GED Certificate	GED	4
Walla Walla Community College	Non-Degree/Non-Certificate Award	Pre Nurse Aid	13

**I-BEST SUMMARY 2004-2005
COMPARISON STUDENTS
COMPLETION AWARD TYPE, TITLE AND NUMBER OF AWARDS**

COLLEGE	TITLE	DEGREE_TITLE	TOTAL AWARDS
Big Bend Community College	Non-Degree/Non-Certificate Award	Nursing Assistant Completer	2
Lake Washington Technical College	Certificate, < 45 credits or 900 hours	Cert Nursing Asst Certificate	2
Lake Washington Technical College	Certificate, < 45 credits or 900 hours	Floristry Certificate	1
Lake Washington Technical College	GED Certificate	GED	1
Renton Technical College	Certificate, 45-89 credits or 900-1799 hours	Accounting Clerk	1
Renton Technical College	Certificate, 45-89 credits or 900-1799 hours	Computer Network Technician	1
Renton Technical College	Certificate, 45-89 credits or 900-1799 hours	Massage Therapy Practitioner	1
Renton Technical College	Certificate, 45-89 credits or 900-1799 hours	Medical Assistant	1
Renton Technical College	Certificate, < 45 credits or 900 hours	Job Skills for Trade/Industry	3
Renton Technical College	Certificate, < 45 credits or 900 hours	Nursing Assistant	3
Renton Technical College	GED Certificate	GED	1

COLLEGE	TITLE	DEGREE_TITLE	TOTAL AWARDS
Shoreline Community College	Certificate, < 45 credits or 900 hours	Nursing Assistant (PET) Cert	1
Shoreline Community College	Certificate, < 45 credits or 900 hours	Phlebotomy Cert	1
Shoreline Community College	High School Completion	HS Diploma	1
Shoreline Community College	GED Certificate	GED	1
Shoreline Community College	Non-Degree/Non-Certificate Award	Fundamentals of Caregiving Cert	6
Skagit Valley College	AA Degree	ATA Human Services	1
Skagit Valley College	Certificate, 45-89 credits or 900-1799 hours	Cert Practical Nursing	1
Skagit Valley College	GED Certificate	GED	3
Skagit Valley College	Non-Degree/Non-Certificate Award	Cert Nursing Assistant	9
South Seattle Community College	Non-Degree/Non-Certificate Award	Basic Skills Career Exploratio	1
South Seattle Community College	Non-Degree/Non-Certificate Award	Short Term Job Prepared	6
Tacoma Community College	Non-Degree/Non-Certificate Award		8
Walla Walla Community College	Certificate, < 45 credits or 900 hours	Nurse Aide	3
Walla Walla Community College	GED Certificate	GED	1
Walla Walla Community College	Non-Degree/Non-Certificate Award	ECE: Child Development	1



APPENDIX B

Renton Technical College I-BEST Case Description

Authors' note: Renton Technical College's I-BEST program successfully increased students' college level attainment and English language skills. The training is part of a longer pathway leading to an Associate Degree. The description in this appendix was written by the college. It explains how the program was structured, students were supported and instruction at the college level for skills training with rigorous ESL support was designed and offered.

Educational Success Ladder in I-BEST/LPN Program

Renton Technical College (RTC) has developed a new program that will provide a customized pathway for non-native English speakers to successfully complete nurse training.

Historically, ESL students have had difficulty in successfully completing programs in allied health, particularly the high-wage career programs. In addition, our health industry partners have expressed concern about ESL employees, particularly in the area of oral expression and comprehension. In response, our deans of allied health, basic studies, and general education, in conjunction with our health industry partners, have developed a program to give ESL students the extra support they need to be successful as LPN graduates. It is called the **I-BEST/LPN Program**.

Renton Technical College attracts a high percentage of English as a Second Language students who want to pursue nursing or other allied health fields. Analysis of test scores clearly indicates the lack of language skills that inhibits student success. A strong basic studies curriculum, a responsive peer tutoring program as well as the new integrated ESL program model at RTC helps promote student achievement at the necessary level of proficiency to compete in traditional professional-technical programs such as nursing.

RTC has been a leader in developing integrated programming for non-native English speakers in the state's community and technical college system. The college has had extensive experience in working with community partners to ensure a prepared workforce. People of color are underrepresented in high demand, high wage jobs in the allied health field. In nursing, for example, they comprise only 14 percent of registered nurses nationwide compared to a minority population of 28 percent. Renton Technical College is a model of diversity; in the nursing program 55 percent of the students are English as a Second Language (ESL), 37 percent are refugees, 56 percent are people of color, and 20 percent are male.⁴ The Allied Health

⁴ As reported in our latest statistics reflecting the 2002-2003 academic year.

department as a whole had an ESL population of 47 percent, 32 percent refugee, and 49 percent students of color.

The integrated **I-BEST/LPN** nursing project provides a clear educational pathway and career ladder. While a student may exit with lower level nursing certification, the longer term goal is for a student to achieve the highest nursing skill level possible, thereby increasing competitiveness in the job market and overall earning power. Students will be Certified Nursing Assistants at the end of the third quarter and Licensed Practical Nurses with an Associate of Applied Science Transfer degree at the end of the ninth quarter. Graduates can then move on to the Registered Nursing program and finally to a Bachelor of Nursing Science program. At each point students can exit the program with nursing certification and licensure to return to the work place.

Employers contribute through sponsorship of tuition and fees (for the occupational skills training), students' supplies and hiring of students upon completion of skills training. Community-based organizations contribute through sponsorship of tuition and fees (for occupational skills training), student supplies, and support services (transportation assistance, child care, clothing, etc.). The Allied Health Advisory Committee will review outcomes and evaluate the effectiveness of the project and assist in developing a plan for sustainability. The deans for basic studies, allied health, and general education are committed to assuring sustainability because we believe that the program will be highly successful and can be integrated into other on-going college programs.

1. Provide curriculum that is customized to the needs of ESL students. -- The I-BEST/LPN program included the development of college-level biology and medical terminology courses for English as Second Language students. Students enter the **ESL Pathway** based on assessment tools such as COMPASS, and a defined assessment of the learners' oral proficiency and literacy skills. This track will eventually have variations for access into the medical assistant, pharmacy technician, and surgical technologist programs; however, the college has designed the pilot project for the LPN program.

Students who are identified as benefiting from an **ESL Pathway** are tracked into a well-defined curriculum which has **bridge** courses in college preparation, developmental education and nursing prerequisite course work integrated into a three quarter cohort experience. During the three quarter **ESL Pathway program** the students have ESL instructors who provide integrated English within courses and work in collaboration with the various theory instructors to fashion the delivery of instruction to the needs of the students.

During the first quarter, students take an established introductory course called "**Allied Health for Success**," which is designed to teach college success strategies in life skills, writing, CPR, First Aid, information/computer literacy, basic math and communication skills. In addition, students complete **Speech for ESL**, **Biology for ESL**, an introductory math course and an ESL language learning lab experience. The language learning lab is designed to provide discussion, real life case scenarios, and dialogue with an allied health focus. In the third quarter, which is the summer quarter, students will take the **Certified Nursing Assistant** program. The ESL instructor team teaches with the nursing skills instructor. Once they have completed this coursework

they can write for their national boards and then upon successful completion apply for licensure.

During the quarters that follow CNA licensure, the student then can work and gain nursing experience. Work experience is an important part of instruction at RTC, and internship (beyond clinical experience) is built into the standard curriculum as well as the ESL track. This experience will enhance their chances of success as they pursue higher levels of nursing education.

The college has designed a separate ESL option for certain classes. For example, **Biology 101** has **Biology for ESL** option that is considerably longer than the standard version of the class. The content is identical, but students get extra time with this first level science class to ensure a solid understanding of the concepts and the vocabulary. In later science classes, ESL instructors and ESL trained science instructors work together to assist student learning. New courses like **Medical Terminology for ESL** join existing courses such as **Speech for ESL** to give students an intensive language learning experience that will have life-long benefits.

Upon completion of the three quarter experience, the ESL students will join the traditional non-ESL LPN students who are in their second quarter course work. The students are still provided support from ESL instructors through the language laboratory experience. The required internships are monitored by a qualified faculty member and **college credit** is provided. The entire **ESL Pathway** is completed in five quarters while the native English speaker track will take three quarters. At the completion of the ESL five quarter LPN program, students will have **all the prerequisite courses** required for the **LPN - Associate of Applied Science degree**. In addition, they will be prepared to articulate into a two year Registered Nursing program and eventually, if they choose, into a four year Bachelor of Science in Nursing program.

2. Disseminate ESL teaching techniques to all science and Allied Health faculty --

A key objective of the **I-BEST/LPN Program** at Renton Technical College is to give the science and Allied Health instructors' techniques to assist ESL students. The goal has been to "train the trainer" in a collaborative effort between the Basic Studies/ESL instructors, and the General Education and Allied Health instructors. Strategies for working with the ESL population have been incorporated into a series of faculty workshops. It is hoped that this ESL techniques training might be expanded eventually to the rest of the college. Renton Technical College has successfully used the "train the trainer" concept as part of a current disabilities services project that incorporates Universal Design for Learning methodology. This UDL pilot project trains an ever-widening network of RTC instructors in improving services to the College's students with learning disabilities.

3. Provide students with state of the art curriculum in language learning -- Renton

Technical College has a strong Basic Studies/ESL department and curriculum. To provide the intensive experience planned in this pilot, the college developed a new **Language Learning Lab** that provides instruction to students that incorporates new learning strategies and modes of delivery. The goal of this component is to be able to provide fairly large numbers of students with technology-based instruction to supplement their classroom language learning experience. The lab contains a variety of

modalities for learning such as digital recording technology, language development software, and modules of real life case scenarios in which students practice **articulation, pronunciation and contextual meaning.**

4. Increase student retention through improving accuracy at placement -- Renton Technical College has identified the need for pre-program entry assessment tools that can identify non-native English speakers whose limited language ability could prove to be a barrier to success. COMPASS testing is required prior to program registration for all students. Combining COMPASS testing with alternative assessment tools such as the CASAS has allowed for more accurate placement. To affect this process, the college has developed procedures and benchmarks that improve the testing of all students to ensure that each student has the best chance for success.

5. Increase student completion rates through reduction of barriers to success -- A critical component of the **I-BEST/LPN** Program is having a case manager available for students during the five quarter experience. Many of our students have multiple barriers to success including ones associated with poverty, reliable transportation, child care issues, housing issues and generally negotiating their way through American society. When the students blend into the standard track in the fourth quarter with native English speakers, they may still require more support services. The college attempts to minimize the impact of these problems on the students' education by providing an on-campus counseling service for the duration of the program.

6. Increase student awareness of alternative academic pathways -- Renton Technical College continues to enroll an increasing number of limited and non- English speaking students in its career and technical education programs, with the health occupations attracting the greatest numbers. This increasingly diverse population that lives in the college's service area has driven our recruitment. In response, the college developed pamphlets, posters, CD- ROMs and other marketing materials targeting limited and non-English speakers to enroll in this alternative **ESL pathway**. Materials are also targeted toward funding sources to educate and encourage enrollment in the **ESL pathway** bridge program.

7. Past performance with integration of ESL with Professional-Technical Programs - In the past, and in response to the needs of its diverse student population, Renton Technical College has integrated ESL instruction with skills training in selected programs on a limited basis and as funding allowed, including Job Skills for Trade and Industry (welding, CPR/First Aid, math, flagger, forklift, etc.), Deli Management, Pharmacy Assistant, Accounting, Electronics, LPN, and Property Maintenance.

Current program retention and completion rates for the LPN program at Renton Technical College are excellent for the general population, but this success rate is not uniform among all student populations. The college has analyzed COMPASS scores, grades, and completion rates for nursing students over the past few years. In the past, ESL students did not have the success rates enjoyed by students who have better language preparation. By implementing this integrated pilot project, the college offers ESL students a chance to enjoy the high success rates of the traditional student population.



LPN Program: Options 1 and 2

Option 1 Traditional Pathway

PREREQUISITES:
Allied Health for Success
Biology*
Math for Health Sciences

Spring 2005
Quarter 1 Traditional
Beginning Algebra
Microbiology*
Medical Terminology
Nursing Assistant
Internship I

Fall 2005
Quarter 4 ESL
Quarter 2 Traditional
Intermediate Algebra
General Psychology*
Human Anatomy & Physiology I*
Internship II

Winter 2006
Quarter 5 ESL
Quarter 3 Traditional
Human Nutrition*
Chemistry*
Human Anatomy and Physiology II*
Internship III

Spring 2006–Fall 2006
Quarters 6-8 ESL
Quarters 4-6 Traditional
LPN Nursing Curriculum
College Algebra*
English Composition*

Option 2 Non-Traditional (ESL) Pathway

Winter 2005
Quarter 1 ESL
Allied Health for Success
Speech for ESL
Biology* with ESL Support
Language Lab
Math for Health Sciences

Spring 2005
Quarter 2 ESL
Microbiology* with ESL Support
Beginning Algebra
Language Lab
Medical Terminology with ESL Support
Internship I

Summer 2005
Quarter 3 ESL
Nursing Assistant with ESL Support

Associate of Applied Science → Registered Nursing Program → Bachelor's of Science in Nursing

Optional

Guidelines for Quality Integration Programs⁵

College representatives have learned a great deal in creating quality integrated learning experiences for Adult Education students. Quality integrated learning occurs when:

- Efforts begin with faculty most optimistic and enthused about integrated learning.
- Faculty members are involved in writing the grant proposal.
- Relationships, roles, and responsibilities are clear with all stakeholders including Student Services, Human Resources, WorkFirst (Washington's welfare reform program), Business Services, Registrar, Finance, etc. as integration program planning and implementation will impact many aspects of the college.
- Regular communication processes are implemented.
- Faculty members are cross-educated about the culture, norms, and values of their respective disciplines.
- Campus leaders are informed and supportive of the project.
- Curriculum is built between Adult Education and Professional and Technical faculty members.
- Outcomes are tracked in parallel (i.e. gains in ESL levels, and certificate graduation in professional and technical elements) to demonstrate actual impact of the integration project.
- Recruitment efforts are strategic and happen early in the program development process.
- One point of contact is provided for student services support. Multiple contacts confuse the students.
- Barriers and conflicts are addressed quickly and as they pop up.
- Students are "pre-screened" and accepted only when they are ready.
- Programs start with short-term certificate programs.
- Programs are partnered with Workforce Development Council (Workforce Investment Boards—WIBs) efforts.

⁵ Source: Washington State Board for Community and Technical Colleges