

Report to the Legislature ESSB 6359

Improving Efficiency and Student Achievement

December 2011



Washington State Board for Community and
Technical Colleges



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EXECUTIVE SUMMARY

ESSB 6359 calls for reduced costs and increased student success

In 2010, the Washington state legislature passed ESSB 6359, which called on the community and technical college (CTC) system to find efficiencies that both reduce costs and improve the quality of education and job preparation for students. This is an ambitious venture that is challenging the CTC system to continue to find new ways of doing business, new ways of using technology, and deeper levels of collaboration and shared services.

The legislation called for three reports: an initial report on efficiencies in 2010; this report, which addresses new and expanded efficiency efforts; and a report next year that will address possible governance changes that may increase efficiency.

The context: A bad economy and shrinking budgets mean higher costs for students, higher demand for education

This is a tough challenge in the midst of multiple years of deep budget cuts and growing demand for college education and job skills training.

Budget cuts, combined with tuition increases of seven percent in 2010-2011 and twelve percent this year, mean that more of the burden is falling on students. At the same time, students are getting less for their money. College staffing, hours and services have been cut, class sizes have grown, and colleges are cutting the number of course sections and professional/technical programs to balance budgets.

Colleges' enrollments soared through 2010, with the college system overenrolled 15 percent in 2010-11. But early indications for fall quarter are that 2011 enrollments are starting to decline. This is not because demand has fallen, but because classes that students need are not available.

Since 2009 state funding for CTCs has been reduced 22 percent and enrollments have grown 19 percent. And at the same time, student achievement continued to grow with a 23 percent increase in program completions. This surge in enrollment and cuts in state funding drove down state funding per student from \$5,080 in 2009 to \$4,124 in 2011 – a reduction of almost \$1,000 per student. Even when tuition revenue is included, per student expenditures fell from \$6,890 in 2008 to \$6,385 in 2011 – a net decrease of seven percent per student.

Between 2009 and June, 2011, colleges have cut:

- 250 exempt positions (ten percent), including 70 administrators and 181 professional technical personnel, a reduction of \$23 million;
- 150 classified positions (three percent) for a reduction of \$8 million;
- 75 full-time faculty (two percent), for a reduction of \$6 million.

Access to adult literacy, English as a second language, and GED preparation courses have been especially hard hit, and enrollment in these programs has declined by ten percent. As colleges become more dependent on tuition revenue, these programs are particularly vulnerable because students in these programs, who are among the lowest income students served, pay only a \$25 per quarter fee.

Efficiencies that respond to the mandate of ESSB 6359

The CTC system is improving efficiency in teaching and learning, student services, business practices, administration and governance.

The CTC system's first priority is to improve efficiencies in ways that improve student success and help Washington's economy grow. Efficiencies are underway that reduce the need for remediation, increase student retention, and shorten time to completion of degrees and certificates. In addition, efficiencies are being implemented to make the system more supportive and seamless for students while reducing costs for college business practices.

Baseline data have been established for these efficiency areas and metrics will be tracked for changes in student achievement, educational costs for students, transaction costs and staffing levels.

1. **Expand Open Course Library to improve course completion rates and dramatically reduce textbook costs.** Course materials for the first 42 Open Course classes were launched on October 31, 2011, and another 39 courses are now being developed for launch in 2012 and 2013.

This year, students will already save \$1.26 million in textbook costs, just from the faculty who developed the first 42 Open Courses. For just one course – English composition – student savings through use of the Open Course Library could total \$4.7 million a year for the 47,000 students who take this class.

2. **Increase the number of college-ready high school graduates to reduce the need for remedial courses.** The CTC system is leading an effort to achieve statewide higher education adoption of Common Core State Standards for high school graduates in math and English by fall 2014.
3. **Streamline pre-college placement including placement reciprocity among colleges and high school transcript based placement** to ensure that students are enrolled in challenging courses appropriate to their skill level by fall 2012.
4. **Redesign pre-college courses to create condensed, modularized and accelerated curricula** that can be tailored to students' needs and help them move further, faster in their education. Seventeen pilot projects are underway, and will be completed by fall 2012.
5. **Create a system to award credit for prior learning to recognize the skills and knowledge that people have acquired in the workplace or military.** Increasing use of credit for prior

learning will reduce the amount of time required to earn degrees or certificates. A single point of contact has been established, reciprocity agreements will be in place by spring 2012.

6. **Share high-cost programs and culling lower-demand programs** to respond to changes in employer demand.

Colleges respond to local economies, and prepare people for high demand jobs. This is critical to getting people back to work. Between July, 2009 and September, 2011, over 560 short-term professional and technical certificate and degree programs (out of a total of 1600) were discontinued, and resources were redirected to open 213 new programs to meet emerging needs.

Colleges work together to boost capacity in high demand fields. The Air Washington consortium represents a significant effort to share training programs, curricula and courses. Statewide collaboration among eleven colleges, employers, labor unions and the Center of Excellence for Aerospace and Advanced Materials Manufacturing is underway to expand aerospace training capacity through fall 2014.

7. **Create a single statewide website that provides a common application for admission for all colleges in the system, and a single financial aid application** with a single statewide deadline by Spring 2012.
8. **Create a single student ID number** by January 2012 that will track student records for enrollment activity in any college in the system, and provide easier access to transcripts.
9. **Create a single portal to house all outside or third party funding and scholarship information** for students by fall 2012.
10. **Migrate to a “cloud” based email system** for all colleges by June 2013.
11. **Pool and share human resources expertise.** Currently, human resources such as staff training, human resource investigations, and human resource policies and procedures are all handled by individual colleges. Centralizing some of these services can improve quality and consistency, and reduce costs, with implementation through 2012.

New efficiencies through local and regional collaboration

Four regional groupings of CTCs took the initiative to identify, evaluate and pilot new efficiency practices that rely on greater sharing of programs, staff training, and other functions.

ctcLink: An efficient approach to business process modernization for all colleges’ student, business, and personnel functions

ctcLink will replace a cumbersome, 30-year-old core student information system, finance system and human resource management system. The college system is implementing a single core information system for all 34 colleges. The implementation of ctcLink will provide the tools for

business process transformation both within the colleges and throughout the system, resulting in a dramatic increase in both effectiveness and efficiency.

Once ctcLink is in place, students will have a single electronic record with one ID number, available to all colleges; prospective students will have one admission application process regardless of where or when they decide to attend; new and returning students will have a single financial aid application process; students will be able to monitor their time to degree and advisors can audit the progress; students will have access to a centralized catalog of all courses; faculty and staff will have a single electronic record with one ID number; and colleges will be able to consolidate purchasing and payroll processing.

This project will be implemented over the next five years, with the first two colleges completed by June 30, 2014; a total of ten completed by June 30, 2015; and eight colleges per year thereafter until all 34 are complete.

The starting point: a baseline of efficiency and a tradition of continuous improvement

Washington's CTC system's efficiency has long been the envy of other states. A 2007 National Commission of Higher Education Management Systems report ranked Washington's community and technical colleges 4th in the nation in productivity – that is, in performance relative to funding. This is a “gold standard” study that factored in costs of living, faculty salaries, and total revenue from state, local and tuition funds in each state. Washington's productivity also ranks substantially above states that have reorganized their college systems to try to reduce costs through consolidated governance structures.

A 2009 efficiency comparison showed that Washington's CTC system spent one-third or \$3,700 less per FTES, as compared to the national average of \$9,735. In addition to spending substantially less, Washington's college system spends a greater share of its budget on instruction and a smaller share on administration than other states.

There are inherent efficiencies in the way Washington's CTC system is organized. The CTC system sustains a high level of system-wide sharing of innovations and best practices, and balances statewide coordination and policy-setting with local autonomy for each college to respond to the unique needs of its community.

Even before the passage of ESSB 6359, the CTC system was focused on a broad array of efficiency improvements.

Four major statewide initiatives to improve performance and efficiency exemplify the CTC system's culture of continuous improvement:

- The **Student Achievement Initiative**, launched in 2006, provides financial incentives to colleges for increasing the number of students who meet specific achievement targets (gaining college ready skills, earning 15 and 30 college credits, completing college level math) that are shown to increase their chances of completing certificates and degrees.

- Development of **ctcLink**, a once in a generation, internet-driven transformation that will integrate all the information that flows through colleges – from student records to building maintenance. A new and more flexible information system will provide new opportunities for streamlining policies and practices across all colleges, providing more seamless services to students, and improving the efficiency of business processes.
- Creation of an **Open Course Library** that supports redesign of 81 high-enrollment, gatekeeper and pre-college classes for in-person, hybrid, or online delivery. (The term “open course” means that the curriculum and other resources are shared freely with the world on the internet. A growing number of colleges and universities are creating open courseware.) The goals are to improve completion rates, lower textbook costs for students, provide new resources for faculty, and link our system to the global online open education resource community.
- **Transformation of pre-college education** by creating ways to move students further, faster so they don’t get discouraged and leave before they reach the “tipping point” where they can get better jobs, transfer to universities, and continue to move up a career ladder.

Efficiencies are achieved in many other important ways as well. The following efficiencies are just a few of those described in the 2010 Efficiency Study report to the Legislature:

- Colleges offer programs such as Running Start, Tech Prep, and I-Best that help students complete their education in less time.
- Workforce training programs respond quickly to changing labor market needs and phase in new programs based on employer demand, while culling programs no longer needed.
- A growing array of standardized practices such as common course numbering make it easier for students who move from one college to another.
- Colleges are rapidly expanding access to “anytime, anywhere” learning through Washington Online (WAOL) and college eLearning enrollments, now 20 percent of all FTES.
- Statewide technology for instructional delivery and interactive meetings is centrally purchased for the whole CTC system, providing more eLearning tools for faculty and students at less cost.
- Colleges have created and shared early warning tools to identify struggling students before they fail so that students get the help they need, when they need it.
- Colleges share 32 instructional programs with course content delivered by one institution to multiple colleges.

Each of these practices saves money – many for both the state and students at a time when costs for students are rising.

Rising to the challenge

Washington’s community and technical colleges pride themselves on their dedication to keeping the door to education and job training open for all Washington citizens. It is painful to everyone in the CTC system to see that door closing because of the collision of growing demand and shrinking resources.

Every leader in the CTC system recognizes the importance of finding ways to keep that door open by improving efficiency and finding innovative ways to educate more people faster and at less cost. Working towards this goal is inherent in the system’s basic nature. Today’s economic distress challenges us to intensify and accelerate this work, to embrace the opportunities made possible by new technologies, and to push hard to keep the door to education open for every Washington resident.

But today’s circumstances also call for a sober examination of the limits of new efficiencies, and the economic and social consequences of letting the door to education and opportunity close. For Washington to grow its way out of our current economic distress, we must educate more people to higher levels of skill and knowledge. While new efficiencies can mitigate the harm of budget cuts, this effort cannot wholly prevent the damage those cuts cause. And the damage is experienced by students who can’t get the classes they need, can’t afford rising tuition, and can’t learn the skills they need to earn a decent living and contribute to economic recovery.

The CTC system is committed – as it has always been – to finding creative ways to improve efficiency in ways that promote student success. To succeed, the system needs a level of state support commensurate with the value of its contribution to economic recovery, prosperity, and the promise of opportunity for all Washington residents.

Introduction

Washington's 34 community and technical colleges have three missions: to provide workforce training in professional, technical and apprenticeship programs; to provide the first two years of instruction for those who transfer to baccalaureate institutions; and to provide pre-college coursework and literacy instruction for under-educated adults, including English language classes for immigrants. In addition, community and technical colleges offer a small but growing number of applied baccalaureate degrees.

Last year, community and technical colleges served 456,000 people (200,000 full-time equivalent students), 330,600 of whom were state-supported (162,300 FTES). Among CTC students,

- 30 percent are parents,
- 44 percent work while attending school,
- 28 percent are unemployed,
- 36 percent are students of color (compared to 25 percent of state population), and
- the average age of CTC students is 26.

Washington's CTC system has traditionally provided an open door to all prospective students by keeping tuition affordable, and by offering programs that meet the educational needs of people at every level of skill and literacy. Building the skills of Washington's workforce has been a critically important contribution to our state's economy, in both good times and bad.

Washington's 34 community and technical colleges are organized into 30 college districts, each with local business and community leaders serving on five-member Boards of Trustees. The mix of programs and services in each college district are determined locally to respond to the needs in their communities, ensuring responsiveness to local economies and the dynamics of changing populations.

This is a tough challenge in the midst of multiple years of deep budget cuts and growing demand for college education and job skills training. Colleges implemented the early cuts by reducing administration and increasing class size. Continued reductions in state funding, however, have caused elimination of workforce programs, basic skills classes, and services important to student success. Colleges' enrollments soared through 2010, with the college system overenrolled 15% in 2010-11. But early indications for fall quarter are that 2011 enrollments are starting to decline. This is not because demand has fallen, but because classes that students need are not available, as colleges have had to cut sections to balance their budgets.

The challenge to increase efficiency

In the spring of 2010, the Washington state Legislature passed ESSB 6359, which called on the community and technical college (CTC) system to find more efficient ways to increase student access and success, improve instructional programs, and develop and retain high quality faculty.

The legislation directed the CTC system to look for new ways to share services among its 34 colleges, to increase program collaboration, and to standardize and centralize administrative functions and systems.

The legislation required three reports. The first, a preliminary report delivered in December, 2010, described efficiencies already achieved and laid out the work plan for production of this second report, which presents an efficiency implementation plan. A third report, due in December, 2012, will deal with potential district consolidations or boundary changes.

The work of finding new ways to increase efficiency was undertaken by a steering committee that includes members of the State Board for Community and Technical Colleges, college trustees, college presidents, faculty union representatives and students. Four groups of neighboring colleges have taken the initiative to work together to identify, evaluate and pilot new efficiency practices. A college president and a local trustee from each of those regional collaboratives are members of the steering committee. (Steering committee participants are listed in Appendix A.)

The steering committee adopted the following principles to guide its work:

1. Recognize and build on efficiencies that have already been achieved through college partnerships, collaborative efforts and within our statewide system.
2. Engage the CTC system to look for additional cost-saving strategies that can be implemented among colleges or throughout the state system, including but not limited to administrative functions, instructional programs and student services.
3. Seek efficiencies among colleges and at the state level that lead to cost savings that will be reinvested in our college system. Cost savings achieved through improved regional or statewide efficiencies will be retained by the colleges to:
 - Improve student access and success,
 - Strengthen instructional programs, and
 - Develop and retain high quality faculty and staff.
4. Recommend strategies that:
 - Support the goals and strategies in the State Board's Mission Study and the Higher Education Coordinating Board's Master Plan,
 - Contribute to student access to instructional programs and services,
 - Contribute to student achievement,
 - Can be deployed in regions and statewide, and
 - Are feasible, sustainable, and shown to save money.
5. Encourage and support the voluntary organization of colleges within regions of the state to discuss and recommend strategies that best respond to the needs of their communities.
6. Encourage broad communication among stakeholders and transparency in processes and decisions.

7. Use criteria to evaluate proposals and measure them against desired outcomes for students, employers, and local communities.
8. Recognize that the role of the State Board is to set policy direction for the CTC system in collaboration with colleges and other partners, and to allocate resources to meet system goals and priorities. The role of the colleges is to meet the educational needs of their communities.

The imperative: Do business differently

The mandate of ESSB6359 is not simply to reduce costs, though successive rounds of budget cuts have already made that imperative. The legislature's intent is to find ways to reduce costs and simultaneously *improve the quality of education and job preparation* that community and technical colleges provide. This is an ambitious venture that is challenging the CTC system to continue finding new ways of doing business, new ways of using technology, and new and deeper levels of collaboration and shared services among colleges.

The Context

A baseline of efficiency

This work was launched from a baseline of efficiency that was already the envy of other states. A 2007 National Commission of Higher Education Management Systems report ranked Washington's community and technical colleges 4th in the nation in productivity – that is, in performance relative to funding. This is a “gold standard” study that factored in costs of living, faculty salaries, and total revenue from state, local and tuition funds in each state.

It found that Washington's CTC system is in the bottom half of state systems in funding, but at or above the 80th percentile in the study's three measures of efficiency: total undergraduate awards per 100 full time equivalent students (FTES), three year graduation rates, and Associate degrees awarded per 10,000 adults ages 25-64.

Even states that have made recent attempts to improve efficiency by consolidating governance structures ranked below Washington in productivity.

A 2009 efficiency comparison showed that Washington's CTC system spent \$6,005 per FTES, as compared to a national average of \$9,735.

An inherently efficient structure

There are inherent efficiencies in the way Washington's CTC system is organized. A single, statewide, governor-appointed Board sets policy, allocates resources, and promotes system-wide strategies for continuous improvement. This centralized budget and policy structure means that colleges have long shared certain planning and infrastructure functions that would otherwise be duplicated in each college or district. At the same time, each college district has its own Board

of Trustees and college administration responsible for meeting educational needs of local citizens and employers. The CTC system takes full advantage of this structural platform for efficiency. It sustains a high level of system-wide sharing of innovations and best practices, and balances statewide coordination and policy-setting with local autonomy for each college to respond to the unique needs of its community.

A proven commitment to efficiency

Even before the passage of ESSB 6359, the CTC system was focused on a broad array of efficiency improvements. Following publication of the Higher Education Coordinating Board's Master Plan in 2007, the State Board for Community and Technical Colleges convened a task force to re-examine the CTC system's mission, and to find more and better ways to reduce barriers and expand opportunities so that more Washington residents can reach higher levels of education.

As a result of the Mission Study and an earlier System Direction study, the CTCs are involved in four major statewide initiatives to improve performance and efficiency in a rapidly changing world:

- Advancement of the **Student Achievement Initiative** launched in 2006, which provides financial incentives to colleges for increasing the number of students who meet specific achievement targets (gaining college ready skills, earning 15 and 30 college credits, completing college level math, completing certificates and degrees) that are shown to increase their chances of completing certificates and degrees. The research-based premise behind these measures is that by focusing on early successes in college, completions will rise. Since the 2007 baseline year, the number of individual students served in the college system has increased 4 percent, overall FTES enrollments increased 22 percent, and the number of total student achievement points has increased by 30 percent, including a substantial 37 percent increase in certificates and degrees earned.
- Development of **ctcLink**, a system that takes advantage of new technology, internet developments and software systems to integrate all the information that flows through colleges – from student records to building maintenance. The CTC system has shared back-office administrative systems for 30 years, but its software and functionality is both limited and outdated. A new and more flexible information system provides new opportunities for streamlining policies and practices across all colleges, providing more seamless services to students, and improving the efficiency of business processes. In 2010-11, system design principles were adopted, a readiness assessment was conducted, and financing was secured. An RFP is being developed and a vendor will be selected by August 2012, with software testing and pilot college implementation through 2014.
- Creation of an **Open Course Library** that supports redesign of 81 high-enrollment, gatekeeper and pre-college classes for in-person, hybrid, or online delivery. (The term “open course” means that the curriculum and other resources are shared freely with the world on the internet. A growing number of colleges and universities are creating open courseware.) Redesigning these common courses distills the best content, materials and

instructional practices, using open education resources from across the country and the world. The goals are to improve completion rates, lower textbook costs for students, provide new resources for faculty, and link our system to the global online open education resource community. Phase 1, with 42 redesigned courses, has been completed, and the Open Course Library website was launched on October 31, 2011. Active dissemination of the 42 courses and redesign of 39 additional courses will occur through 2013 under Phase 2.

- **Transformation of pre-college education** by creating ways to move students further, faster so they don't get discouraged and leave before they reach the "tipping point" where they can get better jobs, transfer to universities and continue to move up a career ladder. New assessment and placement policies, new teaching methods, and better curriculum support this goal.

Efficiencies are achieved in several other important ways as well. The following efficiencies are just a few of those described in the 2010 Efficiency Study report:

- Colleges offer programs that help students complete their education in less time. Running Start, Tech-Prep and I-BEST are examples of programs that help students accelerate learning. Running Start alone enrolled more than 19,000 students last year, saving Washington families \$41 million, and taxpayers \$53 million.
- Workforce training programs respond quickly to changing labor market needs and phase in new programs based on employer demand, while culling programs with less demand. In the last two years, 560 short-term training programs have been eliminated in areas such as pulp and paper manufacturing, residential appraiser, paraeducator and horticulture, and resources were redirected to 213 new programs in high demand and emerging occupations such as green building, aerospace manufacturing, health informatics, energy and sustainability.
- A growing array of standardized practices make it easier for students who move from one college to another. Common course numbering and statewide adult basic education and ESL standards are early examples of a growing trend to make movement among colleges seamless.
- Colleges are rapidly expanding access to "any time, anywhere" learning. Washington Online (WAOL) and college eLearning enrollments have grown to 126,000 students and 31,000 FTES, representing 19% of all state funded enrollments in the college system. eLearning classes save time and commute costs for busy students who are fitting college classes into their work and family responsibilities.
- Statewide technology for instructional delivery and interactive meetings, centrally purchased for the whole CTC system, provide more eLearning tools for faculty and students at less cost per college, and reduce travel for students, faculty and staff.

- Colleges have created and shared early warning tools to identify struggling students before they fail. An academic early warning computer application and online advising tools help students get the help they need, when they need it.
- Colleges share 32 instructional programs with course content delivered by one institution to multiple colleges. Colleges also share curriculum, faculty, staff, services, facilities and equipment in 25 additional programs, generating savings of \$30,000 to \$600,000 per program in start-up costs for equipment-intensive instruction, and \$150,000 to \$400,000 in ongoing costs for faculty and instructional materials.
- Centralized program approval, a variety of ongoing quality improvement initiatives, and close relationships with business, industry, and community partners all work to avoid unnecessary program duplication and to keep the system nimble, so that it can adapt quickly to changing job training and education needs.
- Coordinated statewide faculty and staff training ensures that people who work in the system have the skills they need to make the best use of new technology and improve productivity.

Each of these practices saves money – many for both the state and students at a time when costs for students are rising.

The college system's response to budget reductions

In fiscal year 2009, prior to recent budget reductions, state funding for the CTC system was \$750 million per year. Fiscal year 2013 state funding, at \$585 million, is \$165 million or 22 percent less.

But at the same time state funding has been shrinking, the economic downturn and high unemployment have driven a surge of demand among people who need to learn new skills. Enrollment grew from 136,500 FTES in 2008 to 162,300 in 2011 – an increase of 25,800 or 19 percent.

The surge in enrollment and cuts in state funding drove down state funding per student from \$5,080 in 2009 to \$4,124 in 2011 – a reduction of almost \$1,000. Even when tuition revenue is included, per student expenditures fell from \$6,890 in 2008 to \$6,385 in 2011 – a net decrease of seven percent per student.

Budget cuts, combined with tuition increases of seven percent in FY 2010 and 2011 and twelve percent this year, mean that more of the burden is falling on students. At the same time, students are getting less for their money. College staffing, hours and services have been cut, class sizes have grown, and colleges are cutting course sections and professional/technical programs to balance budgets.

Between 2009 and June, 2011, colleges have cut:

- 250 exempt positions (ten percent), including 70 administrators and 181 professional technical personnel, a reduction of \$23 million;
- 150 classified positions (three percent) for a reduction of \$8 million;
- 75 full-time faculty (two percent), for a reduction of \$6 million.

Access to adult literacy, English as a second language, and GED preparation courses have been cut, and enrollment in these programs has declined by ten percent. As colleges become more dependent on tuition revenue, these programs are especially vulnerable because students in these programs, who are among the lowest income students served, pay only a \$25 per quarter fee.

With the additional cuts adopted in the original 2011-13 biennial budget, colleges cannot sustain the 2011 levels of enrollment, and enrollments are expected to fall by 22,770, to 307,840 students by 2013. Potential additional cuts in the 2012 supplemental budget would further reduce colleges' capacity to educate students. Colleges simply cannot continue to serve the level of demand that the system is experiencing. The open door to education that has been the pride of our state is closing for a growing number of people who won't be able to learn the skills they need to earn a decent living. Clearly, this will reduce our state's capacity to grow our way out of this economic downturn.

New efficiencies that respond to ESSB 6359 and today's budget challenges

The CTC system is improving efficiency in teaching and learning, student services, business practices, administration and governance. It is leveraging the power of its statewide system to increase its bargaining power in purchasing, and creating a single, statewide IT platform for a host of functions and services. The goal of these efficiencies is to improve service to students and increase student success while saving money for both the state and students.

Baseline data have been established for these efficiency areas and metrics will be tracked for changes in student achievement, educational costs for students, transaction costs and staffing levels.

Improve teaching and learning

The CTC system is committed to continuous improvement in student achievement and success. Faculty and staff are committed to invest the time, creativity and energy necessary to this process.

1. Expand Open Course Library to improve course completion rates and dramatically reduce textbook costs

The CTC system is developing shared, online curriculum and texts for 81 high-enrollment classes. These materials are open to use by anyone, anywhere. They can be used for online classes, for hybrid classes that do some work online and some in person, and for traditional in-person classrooms.

Course materials for the first 42 classes were launched on October 31, 2011, and another 39 courses are now being developed for launch in 2012 and 2013.

Putting these materials online is producing dramatic savings in textbook costs for students. Full time students now spend approximately \$1,000 per year on textbooks, and textbook prices have risen at twice the rate of inflation. A recent study by student organizations found that seven out of ten survey respondents said they had not purchased one or more required texts because of their cost, even though 78 percent acknowledged that this would hurt their academic performance. A 2009 report by Public Agenda found that 60 percent of college dropouts said that textbook costs were a factor in their decision.

For just one course – English composition – student savings through use of the Open Course Library could total \$4.7 million a year for the 47,000 students who take this class. The 42 faculty course developers and their departments will save students \$1.26 million by using the open textbooks during the 2011-12 school year, which alone exceeds the \$1.18 million cost of creating the courses.

By removing the barrier of textbook cost, and enabling students to review and preview course material online, the CTC system also anticipates improved course completion rates for Open Course Library courses.

State support for the Open Course Library helped the CTC system win a \$750,000 grant from the Bill & Melinda Gates Foundation to expand the number of courses for the Open Library. SBCTC won an additional Gates Foundation grant for \$600,000 to partner with Creative Commons to help other states find, create and manage open resources as part of a federal Department of Labor grant project.

The Open Course Library has sparked an international project called “Top 50 Courses” to list the highest enrolled common courses across the U. S. and around the world. Participating in this global movement for open course materials will yield higher quality, lower cost texts and curricula for many more classes in the years to come.

Efficiency can be improved by doing more to ensure that graduating high school students are well-prepared for college, that all students are accurately placed in the level of coursework they are ready for, and that their learning is accelerated. Increasing students’ success rates in the first courses they take is also vital to improving student retention and speeding them on to certificate or degree completion. These measures accelerate student success by reducing the time students

spend in school, and save money for both students and the state. The CTC system is undertaking ambitious and transformative work to:

2. Increase the number of college-ready high school graduates to reduce the need for remedial courses.

The CTC system is helping lead an effort to achieve statewide higher education adoption of Common Core State Standards for high school graduates in math and English. The Common Core State Standards have been created and adopted by states working together under the leadership of the National Governors Association. These standards provide clarity and consistency, so that all students and high schools know what skills and knowledge are required to be ready for college level classes when young people graduate. These standards build on the state's well-regarded Transition Math Project, which brought together K-12 and college educators to develop consistent standards for college math readiness.

Washington is one of ten states that is receiving a three-year, \$720,000 grant from Rockefeller Philanthropy Advisors, funded by the Lumina, Hewlett and Gates Foundations to help K-12 schools, the CTC system and the state's universities adopt and implement the Common Core State Standards. The activities to be performed during 2012-2014 include:

- Review of the standards by K-12 and higher education faculty;
- Articulation of Washington's existing Transition Math Project and English College Readiness with the Common Core State Standards;
- Review and adoption of the Smarter Balanced Assessment as a college-readiness indicator; and
- Joint curriculum development projects in math that are consistent with the Common Core standards for dissemination to high school and college faculty.

3. Streamline pre-college placement and ensure that students are enrolled in courses appropriate to their skill level.

Colleges will use multiple measures of students' skills and knowledge to reduce reliance on a single standardized test, provide a comprehensive pre-test orientation to increase student performance, and establish reciprocity of placement decisions among colleges. One of the new measures colleges are piloting is high school transcript-based placement, which guarantees placement into college level courses for students who earn good grades in rigorous high school classes. This work is aimed at reducing the need for students to take full courses when they may only need a brief review to refresh and restore skills they may not have used for some time. Placement reciprocity policies and new placement options will be in place by Fall 2012.

4. Redesign pre-college courses to create condensed, modularized and accelerated curricula that can be tailored to students' needs and help them move further, faster in their education.

Colleges are collapsing levels of precollege math and writing, combining precollege and college level courses, and embedding extra instructional support and tutoring into precollege classes.

Nine colleges are piloting the highly successful I-BEST model, which integrates basic skills and workforce education courses, so that students learn literacy and/or English language skills and job skills simultaneously, rather than sequentially. Four colleges are piloting I-BEST for academic courses, combining basic skills and college level transfer courses. Due to the integrated, accelerated teaching model for these courses, I-BEST is an expensive model of instruction, because courses that combine job and academic skills typically require two teachers, but they accelerate learning for students and increase their rates of completion.

Seven colleges are redesigning accelerated precollege math courses, collectively involving 162 full- and part-time math faculty, and potentially benefiting 9,700 math students each year.

All pilot projects will be completed by Spring 2012 and disseminated system wide in 2012-13.

5. Create a system to award credit for prior learning to recognize the skills and knowledge that people have acquired in the workplace or military.

Increasing use of credit for prior learning will reduce the amount of time required to earn degrees or certificates. To do this, colleges have identified a single point of contact on each campus (completed in fall, 2011). They are adopting reciprocity agreements among colleges and universities to ensure the portability of prior learning credits (to be completed by spring 2012), and publishing prior learning assessment information in college class schedules and on college websites (to be completed by fall 2012).

These measures will reduce the need for remedial classes, and for required classes that might be waived for students who can qualify for prior learning credits. For every one percent reduction in required pre-college enrollments, \$1.2 million will become available for redeployment to serve more students. For every one percent reduction in required college-level enrollment, \$7.3 million will become available for additional college courses.

6. Improve responsiveness to changes in employer demand by sharing high-cost programs and culling lower-demand programs

The CTC system's ability to adapt quickly to shifts in employer demand for different skills has helped the system improve efficiency and cope with funding reductions while continuing to meet employer and student needs. Between July, 2009 and September, 2011, over 560 short-term professional and technical certificate and degree programs (out of a total of 1600) were discontinued, and resources were redirected to open 213 new programs to meet emerging needs. Closed programs included pulp and paper manufacturing, residential appraisal, para-educator, and horticulture. New programs are in high demand occupation areas such as health care, aerospace manufacturing, green construction and sustainable energy.

The college system's Air Washington consortium is a key example of colleges leveraging programs and sharing curriculum to respond to a critical employment need that will stimulate the state's economy. Under the leadership of Spokane Community College, working with the Center of Excellence for Aerospace and Advanced Materials Manufacturing, the consortium includes 11 community and technical colleges, aerospace employers, labor unions, and local workforce

development councils. The colleges will provide trained employees for The Boeing Company and 650 aerospace companies across the state. The consortium will develop and share curriculum for pre-employment skills, industry specific short-term certificates, I-BEST (integrated basic skills and job skills) models and other advanced manufacturing associate degrees, and integrate European aviation certification in FAA-approved aircraft mechanic programs. Colleges will use common course numbers for transportability among the colleges, and develop on-line courses to fill courses with pooled enrollments. The planning began in 2010 with a goal of producing 2,600 additional trained workers in manufacturing, assembly, electronics, AS9100 certification and composites by 2014, increasing the college system's current output by 25 percent.

Efficiencies in student services and business practices

The college system is standardizing student processes to reduce administrative costs and increase convenience for students. Making fuller use of the platform of a statewide system to streamline and standardize applications, financial aid, student ID numbers and transcripts promises to reduce costs and make the college system more seamless and easier to use. Colleges have work in progress to:

7. Create a single statewide website that provides common applications for admission and financial aid for all colleges in the system.

There will be a single statewide deadline for community and technical college financial aid applications. The common applications and statewide website are expected to launch in spring, 2012 for the 2012-13 academic year.

8. Create a single student ID number.

A single student identification number will create student records that are student centric rather than college centric, and allow students and colleges to track cumulative student progress from attending multiple colleges. Programming of the existing administrative systems to accommodate a single student ID is estimated to be completed by December 31, 2011 with college use beginning winter quarter. The ultimate goal of a single student record and a single student ID is part of the ctcLink project.

9. Create a single portal to house all outside or third party funding and scholarship information for students.

This portal will allow colleges to coordinate student aid funding from multiple sources and streamline financial aid awards for both students and colleges. The completion goal for the portal is fall quarter 2012.

The CTC system spends an estimated \$34 million annually on personnel costs to process college applications, register students, process financial aid applications, and process student transcripts. Many students apply for admission and financial aid at multiple institutions. As colleges streamline those processes, adopt common deadlines, and process paperwork at a regional or

statewide level, staff time could be saved and redeployed to other student support functions. For every one percent reduction colleges make in these student services activities, the system would free up \$340,000 in staff effort annually to redeploy towards critical student retention activities.

10. Migrate to a cloud-based email system.

Most CTCs today have locally hosted or “on-premise” email systems. This means the colleges are financially and operationally responsible for the server hardware, software, administration, maintenance, upgrades, back-ups, and recovery. The hardware typically has to be replaced every three to five years. In a cloud hosted e-mail solution these are outsourced to a vendor such as Microsoft or Google, who assumes those responsibilities, including the cost of hardware replacement. The physical hosting of the email systems is in a shared data center owned and managed by the vendor. Today most colleges have already outsourced student email to either Microsoft or Google. The next phase is to outsource faculty and staff email. Colleges are currently pilot testing cloud email solutions. Colleges individually will implement at a pace commensurate with their available resources with the goal that all colleges migrate email to the cloud by June 2013.

The two major cloud email vendors are Microsoft and Google, and they do not charge higher education institutions for their basic service. A conservative estimate of savings from using this service is \$25,000 per college per year, or \$750,000 per year for the college system.

11. Pool and share human resources expertise.

Currently, human resources such as staff training, human resource investigations, and human resource policies and procedures are all handled by individual colleges. Centralizing some of these services can improve quality and consistency, and reduce costs. The following measures are planned for implementation through 2012:

- Create a central source for online staff training courses rather than having colleges duplicate them.
- Create a pool of human resource directors and professionals with investigative experience who can investigate complaints related to discrimination or harassment, rather than having colleges hire outside investigators.
- Create a suite of required and recommended human resource policies and procedures, based on the state Attorney General’s model policies, and housed on the SBCTC website, so that individual colleges do not have to create them. SBCTC staff will keep the central repository updated as advised by the Attorney General’s office.
- Establish a single website for benefits information for new employees. Currently, each college must explain complex information on benefits, costs, eligibility and options to new employees. A single, web-based source for this information will save time and ensure that new employees understand their benefits.

New efficiencies through local and regional collaboration

Local colleges create the innovations that benefit other colleges. The college system has a long history of identifying and sharing evidence based best practices across the state system.

Four regional groupings of CTCs took the initiative to identify, evaluate and pilot new efficiency practices. The following are examples of some of the efforts undertaken in those four regions:

The five colleges in **Pierce County** (Bates Technical College, Clover Park Technical College, Pierce College Fort Steilacoom, Pierce College Puyallup, Tacoma Community College) have implemented:

- Invista Performance Solutions, a new jointly owned and operated corporate training organization that centralizes marketing and delivery of corporate education throughout the region, using consistent quality standards and a single point of contact for employers in Pierce County. The five colleges signed a Memorandum of Understanding launching the new corporate education center in September, 2011. This agreement creates a model for collaborating on academic programs as well.
- The colleges have worked together to eliminate unnecessary program duplication, assisting in “teaching out” student cohorts before closing programs, and agreeing on sole providers in the county for certain high cost programs. The five colleges have adopted countywide coordination of their nursing programs, and are considering a single director of nursing for all Pierce County colleges.
- The colleges are sharing employee recruitment activities, advertising, and applications, especially for part-time faculty. They are sharing staff development, and conducted countywide supervisor training for 150 employees. The proposal for statewide sharing of human resources expertise for benefits information, personnel policies and investigations came from the work in Pierce County.

The **Northwest Higher Education Coalition** (Bellingham Technical College, Edmonds Community College, Everett Community College, Northwest Indian College, Olympic College, Peninsula College, Skagit Valley College, Western Washington University, Whatcom Community College) have worked together on:

- Shared curricula in energy efficiency management, advanced manufacturing, aerospace and health occupations such as nursing, physical therapy assistant and radiologic technology;
- Faculty-to-faculty technology mentoring; and
- Coordinated veterans’ services, that raise the level of outreach and support to veterans through the Washington State VetCorps.

Colleges in the **Five Star Consortium** (Cascadia Community College, Edmonds Community College, Everett Community College, Lake Washington Institute of Technology, Shoreline Community College) have signed a Memorandum of Understanding, agreeing to implement:

- Shared student records to ease student movement among the colleges;
- Waiving the requirement that students must earn their last credits at the home college to earn a degree, to more efficiently move shared students toward completion;
- Common criteria and reciprocity for English and math placement; and
- Shared employee background checks and personnel investigations.

Everett Community College is the pilot for turning over their payroll processing function to Bellevue College.

Eastern Washington colleges (Big Bend Community College, Columbia Basin College, Spokane Community College, Spokane Falls Community College, Walla Walla Community College, Wenatchee Valley College, Yakima Valley Community College) have agreed to share:

- Technology applications and servers
- Basic skills courses and faculty training
- Technical courses, curricula and equipment in refrigeration, general agriculture, orchard, viticulture and enology management, network administration, nuclear medicine, medical lab technician, precision machining, and auto body repair.

ctcLink: Business process modernization for all colleges' student, business, and personnel functions

The CTC system is using opportunities created by new technologies to create a groundbreaking, once-in-a-generation re-engineering of its educational and administrative processes. This project leverages the inherent efficiency of the 34-college system by creating a much higher level of uniform, system-wide services and business practices. The implementation of ctcLink will provide the tools for business process transformation both within the colleges and throughout the college system, resulting in a dramatic increase in both effectiveness and efficiency.

ctcLink will replace a cumbersome, 30-year-old core student information system, finance system and human resource management system. The current system is a patchwork of some state-provided and some locally developed processes that are uneven, sometimes incompatible with one another, and increasingly labor-intensive to maintain.

The new system will shift colleges from using duplicative, locally developed forms and processes to using a single, centrally provided system of online student and administrative functions. This will be made possible with a single, statewide purchase of software and hosting

services, and a single installation for all 34 colleges and the State Board for CTCs. It will require colleges to use standard business processes, and eliminate local customization and complication to keep technical and operational standards uniform. The result will be a high level of self-service available to students, staff, vendors and the public. The new system will include a single, shared:

- Student record and ID number,
- Employee record and ID number,
- Admission application,
- Financial aid application,
- Degree audit, and
- Course catalogue.

It will also include consolidated purchasing and consolidated payroll processing.

The timeline for implementing this project is as follows:

- August, 2011 – August, 2012: Develop RFP and select vendor
- 2012 – 2013: Configure and test software
- 2013 – 2014: Implement in pilot colleges
- 2015 – 2016: Implement in first wave of colleges
- 2015 – 2016: Implement in second wave of colleges
- 2016 – 2017: Implement in third wave of colleges

Negotiating a single, statewide contract for information technology software, hardware and vendor services will save money by creating economies of scale and purchasing power. Assuming a savings of five to ten percent, this will save the colleges between \$700,000 and \$1.4 million annually. With a modern IT system, reducing transactions in accounts receivable, budgeting, contract administration, facilities management, fixed assets and property accounting, administration, risk management and employee expense reporting will also reduce costs.

A single statewide technology platform will yield savings in effort equivalent to 25 full time employees who currently administer and maintain local systems. The resulting savings are estimated at \$2.5 million per year. Additional savings will be realized in reduced data center costs, power, back-up and recovery, hardware and software upgrades, and other support.

Governance and administration

Washington's community and technical college system is organized to maximize local responsiveness and statewide impact. Thirty college districts are governed by local business and community leaders serving on district Boards of Trustees. These district boards and their colleges determine the mix of programs and services provided to their communities based upon local educational needs and the dynamics of changing populations and local economies.

The approach to the governance analysis is to maximize the strengths of both local innovation and responsiveness and the efficiencies gained by the colleges working together as a system.

As directed by ESSB 6359, the CTC system is analyzing whether costs can be reduced by governance changes such as consolidating college districts and sharing more programs and functions among colleges. The system is considering how various governance changes would affect costs for administration, labor contracts, and educational programs. It will also examine the possible impact of such changes on student access and completion, and ability of local colleges to respond quickly to employer needs for skilled workers.

While the report on governance recommendations is not due to the Legislature until December 2012, the Efficiency Study Steering Committee has already begun their analyses. To date the Committee has:

- Examined community and technical college governance changes in other states,
- Reviewed comparative data on overall administrative spending in college systems nationally,
- Identified governance options to examine more fully,
- Developed criteria by which to evaluate those governance options, and
- Identified areas of ongoing cost impacts and begun initial analysis on some of those impacts.

Based on experiences in other states, the following governance options are being examined:

- Single college districts
- Shared programs, services and functions among neighboring colleges
- Multi-college districts with independent higher education accreditations
- Multi-college districts with a single district-wide higher education accreditation.

Criteria to evaluate those governance options include:

- Impact on student access and completion: Will students be better served? Will they reach their educational goals faster? Will the quality of teaching and learning be maintained or improved?
- Cost impacts on college administration, program duplication and faculty and staff labor contracts: Will the cost of doing business be reduced? Will the system be both more effective and efficient?

- Impact on local responsiveness: Will responsiveness to employers' education and training needs in local communities be maintained or improved?

Governance analysis findings to date

Washington's community and technical colleges already spend less on administration than their peers in other states. Washington's CTCs spend a greater share of their budgets on instruction, about the same on student services, and a smaller share on administration than their national peers. The share of total expenditures spent on administration is about the same for colleges and universities.

In addition, due to budget cuts, the CTC system reduced administration by 250 exempt positions and 150 classified positions from 2009 through June 2011, thus reducing administration salary costs by \$31 million per year. Further staffing cuts are expected to manage the 2011-13 budget reductions. Nonetheless, the college system is exploring whether further reductions in costs are possible through changes in the way colleges are governed. Consolidation of college districts, further collaborative agreements, combining duplicate programs, and closing facilities or program locations are all on the table. In fact, some of these actions have already been taken by colleges around the state.

One reason to change governance is to increase productivity of every dollar spent. As noted earlier in this report, Washington's community and technical colleges are among the highest performing systems in the country when expenditures and productivity are compared.

Washington CTCs are in the bottom half of state systems in funding per FTES, but in the top 20 percent in performance, including student completions per FTES. Even other states where governance changes have been made (Wisconsin, Kentucky, Georgia, Indiana, Connecticut) significantly lag performance in Washington.

Governance related cost factors

In the analysis of the potential savings from consolidating districts, merging local labor contracts is a particular concern. Labor contracts are bargained at each district. In the event of a district merger, reconciling differences in compensation and workload requirements would become an issue at the bargaining table and would likely drive additional ongoing costs.

For faculty, the potential cost-drivers are full- and part-time faculty salaries and the number of contract hours in a year. For example, the average full-time faculty salaries in the four Pierce County college districts range from \$52,400 at Clover Park Technical College to \$56,800 at Tacoma Community College. Part-time faculty salaries in the two Whatcom County college districts are about \$24,000 at Bellingham Technical College and \$29,700 at Whatcom Community College. In the Pierce County contracts, total contract hours range from 1,230 a year at Tacoma Community College to 1,658 at Clover Park.

At the high end potential cost, salaries for full-and part-time faculty would be driven to the highest salary and workload would be driven to the lowest annual hours. At the low end potential cost, per hour salaries would be driven to the highest level. With 500 full-time faculty and 480 FTE part-time faculty in the Pierce County college districts, and 150 full-time faculty

and 140 FTE part-time faculty in the Whatcom County college districts, reconciling the differences in contracts has the potential to drive significant cost increases.

The Efficiency Study Steering Committee and the college system are continuing to evaluate governance changes. The report due next December will include analyses of the governance options against the criteria of student impact, cost, and community responsiveness, as well as recommendations for any changes in current college district boundaries.

Rising to the challenge

Washington's community and technical colleges pride themselves on their dedication to keeping the door to education and job training open for all Washington citizens. It is painful to everyone in the CTC system to see that door closing because of the collision of growing demand and shrinking resources.

Every leader in the CTC system recognizes the importance of finding ways to keep that door open by improving efficiency and finding innovative ways to educate more people faster and at less cost. Working towards this goal is inherent in the system's basic nature. Today's economic distress challenges us to intensify and accelerate this work, to embrace the opportunities made possible by new technologies, and to push hard to keep the door to education open for every Washington resident.

But today's circumstances also call for a sober examination of the limits of new efficiencies, and the economic and social consequences of letting the door to education and opportunity close. For Washington to grow its way out of our current economic distress, we must educate more people to higher levels of skill and knowledge. While new efficiencies can mitigate the harm of budget cuts, this effort cannot wholly prevent the damage those cuts cause. And the damage is experienced by students who can't get the classes they need, can't afford rising tuition, and can't learn the skills they need to earn a decent living and contribute to economic recovery.

The CTC system is committed – as it has always been – to finding creative ways to improve efficiency in ways that promote student success. To succeed, the system needs a level of state support commensurate with the value of its contribution to economic recovery, prosperity, and the promise of opportunity for all Washington residents.

**Efficiency Study
Steering Committee Members
2010-2011**

State Board members

- Erin Mundinger (Chair)
- Jim Bricker
- Sharon Fairchild

College presidents

- David Beyer, Everett Community College
- Kathi Hiyane Brown, Whatcom Community College
- Michele Johnson, Pierce College District
- David Mitchell, Olympic College
- Jim Richardson, Wenatchee Valley College

College trustees

- Jim Cunningham, Bellingham Technical College
- Theresa Pan Hosley, Bates Technical College
- Shoubee Liaw, Shoreline Community College

Faculty Unions

- Gary Parks, Shoreline Community College, AFT
- Sandra Schroeder, AFT
- Carla Naccarato Sinclair, WEA
- Ruth Windhover, WEA

Students

- Rosemarie Clemente, Pierce College, Puyallup
- Danielle Perkins, Clover Park Technical College

State Board Staff

- Charlie Earl
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