



Annual Report

2009-2010

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Month Day Year

Month Day Year

**Executive Summary**

The Center of Excellence for Information and Computing Technology’s (CoE for ICT) three primary commitments in serving the community and technical college system (CTC) in its entirety are:

1. Provide high-quality, effective, free and/or reasonably priced innovative opportunities such as events, services, research, resources for ICT educators.
2. Partner, recruit, solicit advice and input, as well as sponsorships and in-kind donations, from industry to better align CTC students educational experience to current and future workforce needs.
3. Present transparent information related to state-funded work Center products and programs so stakeholders are confident of: 1) cost-efficiencies; 2) a return on the annual investment; 3) the evaluative data demonstrating success; and, 4) tangible system value.

The Center developed and implemented the following annual and new events, resources, research, services, and a community forum for the 2009-2010 year:

**Events**

* Careers in IT: The Real Story
* Futures Summit at Microsoft
* Green IT Speaker Series
* Working Connections IT Faculty Development Institute

**Resources**

* Camtasia and Web 2.0 Videos
* CoE for ICT Website
* High Impact Centers of Excellence Report
* I-Best Curriculum
* ICT Program Directory
* Miscellaneous Projects, Services, (i.e. advisory boards)

**Research**

* Healthcare Informatics
* ICT Veterans Apprenticeship and Employability Skills Course project

**Services**

* ICT Consulting
* ICT Review

The Center of Excellence’s 2009-2010 annual report highlights Center events, resources, research, and services, reviews its processes, and details the state’s return on investment. This report: 1) showcases achievements; 2) describes Center impact on the community and technical college (CTC) system as a whole; 3) documents connections made between industry and educators; and, 4) examines cost savings by focusing on six selected Center initiatives.

The return on investment based on a selection of six events, resources, research, services, or activities related to the community forum approximates **$285,373**. The annual core funding for the Center is $120,000, with performance funding at a minimum of zero to a maximum of $50,000. The aggregate return on the combined value of the six highlighted Center projects and initiatives exceeds the annual core and performance funding by over **$115,373**.

**About the Center of Excellence for Information and Computing Technology**

The Center is a statewide resource for the CTC system, K-12 educators, and builds crucial relationships with information and computing technology industry professions in order to leverage:

* Best practices for ICT education, professional development opportunities, and events to create opportunities for faculty and students to collaborate with industry.
* Up-to-date research, including ICT trends that impact hiring, educational needs and business growth across industry sectors in Washington State.
* Products, services, consulting, resources, community forums, and research to ensure faculty receive pertinent access to information regarding new and emerging technologies as well as changes in workforce demand.
* K-20 faculty professional development opportunities and student-centric events that focus on informing students about careers in information and computing technology.
* Industry research to keep educators informed on emerging technologies that translates into updated programs, curriculum, and best practices.
* Pathways through better educational system coordination to assist in building seamless educational and work-related systems.
* Deliver effective, efficient, industry-relevant professional development training to build a competitive workforce for Washington State.

**Center Personnel:**

Maureen Majury is Director for the Center of Excellence for Information and Computing Technology. She manages Center initiatives, services, and activities including: the annual Washington State Working Connections IT Institute, “Careers in IT: The Real Story”, the IT Futures Summit at Microsoft, the Center’s website, and, the quarterly CoE for ICT newsletter.  She also performs IT program audits and reviews as a consultant.

New Center activities and initiatives for 2009-2010 include: the publication of the Washington State CTC ICT program directory, the ICT CTC program review for six colleges, *Veterans: The Ideal ICT Professional and Apprenticeship* initiative, the Green IT Speaker Series, a Web 2.o video series for K-20 educators.

Ms. Majury also provides fiscal management for National Workforce for Emerging Technologies. Some of her past projects include updating the Cyber Security and Information Assurance skill standards with CSSIA and acting as PI on the IT Skill Standards update project.

Ms. Majury received her M. Ed. (Leadership and Policy Analysis Studies), a B. A. in English and history, and a two-year secondary teaching degree, all at the University of Washington.  Ms. Majury developed leadership curriculum and provided program advice as a part-time faculty for the college’s Leadership Institute managed by Student Programs and offered through the Human Development program. She has worked at Bellevue College from 1992 until present.

**Center Strategies**

The Centers were codified into statute during the 2009 legislative session in SBH 1323. It is the role of the centers of excellence to employ strategies to: Create educational efficiencies; build a diverse, competitive workforce for strategic industries; maintain an institutional reputation for innovation and responsiveness; develop innovative curriculum and means of delivering education and training; act as brokers of information and resources related to community and technical college education and training for a targeted industry; and serve as partners with workforce development councils, associate development organizations, and other workforce and economic development organizations.

***The following are examples of Center strategies.***

**EVENTS**

**Careers in IT: The Real Story (April 2009)**

Students, teachers, faculty, counselors, and career specialists are annually invited to bring their students to *Careers in IT: The Real Story*, to learn how important information and computing technology (ICT) is to their future.  *Careers in IT* is a free, half-day event.  The 5th annual event took place on April 21, 2010.  It is an excellent opportunity for students to consider and plan to for an ICT degree at a two-year community or technical college.

Students, K-20 educators, paraprofessionals, and administrators have a chance to listen to an industry professional’s keynote speech relevant to the changing workforce needs. For example, this year, given the challenging economy, the keynote shared 1) how students can stand out in an increasingly competitive job market; 2) how to maximize their educational experience, including internships or extracurricular activities; and, 3) how upcoming graduates can take proactive steps to better prepare themselves for the job market.

Each year the event features an industry keynote speaker, panelists from a variety of IT organizations, who speak about their careers, experience in colleges, preparation for a career in IT, and what their daily challenges and opportunities are, as well as answering attendee questions.  Donated prizes are typically raffled off. Microsoft has sponsored the last four year’s prizes and giveaways, including the Xbox 360 as well as video games. See *Appendix I* for evaluative data. **System savings: $37,800 (includes in-kind donations)**

 **Green IT Speaker Series (February 2010)**

The Center presented a speaker series with comprehensive theme of Green IT for winter and spring quarter 2010. It focused on Green IT best practices, emerging technologies, and what technical knowledge and skills industry is expecting from community and technical college graduates.

**“What is Green IT?” presented by the Center of Excellence for Information and Computing Technology**

This presentation was hosted at Bellevue College on Thursday, February 11, 2010, from 11am-1pm. It provided an overview of Green IT as well as covering the background in energy consumption in IT infrastructure to set the stage for understanding the magnitude of challenges faced in improving the environmental impact of information technology.  Three main areas were discussed, including:  Energy Efficient IT Architecture, Advances in Power and Cooling, and Integration with Building and Landscape Architecture. The PowerPoint presentation is available on the Center’s website. Evaluations were collected from attendees.

**“Building Codes” presented by Renton Technical College’s Center of Excellence for Construction**

This presentation was hosted at Bellevue College on Tuesday, February 23, 2010, from 7pm-9pm. It provided an overview of building codes which focused on people-ability, planet-ability, profit-ability, and the new bottom line. It was the fifth in the Center of Excellence for Construction’s “Green, Green, Greenest” Speaker Series . See *Appendix I* for evaluative data.

**“Sustainable Business Practices” presented by the Center of Excellence for Information and Computing Technology**

This presentation was hosted at Bellevue College on Wednesday, June 30, 2010, from 12pm-1pm. It provided an overview of sustainable business practices creating a better balance between social, environmental and economic factors for short- and long-term performance. It also examined energy and resource efficiencies as critical to decrease the environmental impact of organizations while at the same time improve financial health. Finally the topic explored conserving; recovering and managing resources ensure that companies have long term access to potentially finite assets. It was the third and final Green IT presentation in the series for the year. See *Appendix I* for evaluative data.

**The Washington State IT Futures Education Summit (May 2010)**

The Summit is an annual one-day free event at the Microsoft Corporate Conference Center, Redmond, Washington. Technical and workforce development instructors across the state discovered new and innovative ways to improve IT education. This event features Microsoft, industry, and CTC speakers in various disciplines of IT who share the impacts, challenges, growth and demands of technology.

The Summit offers attendees the opportunity to:

* Learn about current upcoming technical skills sought by businesses
* Focus on integration of new technologies and strategies for classroom learning
* Choose a break-out session with industry and faculty co-presenters for a specific area of interest
* Network with other instructors to build a community amongst our institutions

This year’s keynote speaker was Mr. John Perera, General Manager, Microsoft, who addressed *Information Technology Developments: What Do the Next Five Years Mean for You?* Past speakers have included Mr.  Jim LeValley, Group Product Manager for the Academic Segment, Microsoft Learning at Microsoft Corporation (“Job Market Outlook for IT Professionals”); and, Mr. Martin Bean, Managing Director of Education for Worldwide Public Sector at Microsoft Corporation in Redmond, Washington. See Appendix I for evaluative data. **System Savings**: **$48,830**

 **Working Connections IT Faculty Development Institute (August 2009)**

The Center hosted the tenth annual Washington State Working Connections IT Faculty Development Institute from August 25th to August 28th, 2009.

The following tracks were offered:

* Windows 7 (Instructor: Adam Carter, Microsoft)
* SharePoint: Why Employers Demand Your Students Know It (Instructor: Steve Fox, Microsoft
* Camtasia Studio, Snagit & Jing (Instructors: Jean Kent, North Seattle Community College emeritus)

The Institute’s 38 participants came from 14 of the 34 Washington state community and technical colleges, as well as the Puget Sound Skills Center.

**System Savings: $26,020.**

Sponsors contributing to Institute success:

* Center of Excellence for ICT
* Course Technology
* League of Innovation (CIT)
* Microsoft Official Academic Course
* Microsoft IT Academy

Bellevue College and its program and service departments and NWCET provided institutional support. See *Appendix I* for evaluative and return on investment data. Note: The news for 2010 is encouraging with 62 currently registered as of June 28, 2010.

**RESOURCES**

**Center of Excellence for Information and Computing Technology Website (September 2009-June 2010)**

The Center’s new website objectives are to:

* Create a real-time dissemination point for all Center-related events, resources, research, and services.
* Invite a dialogue through the “Our Community” posting board, which would feature regular updates relevant to educators, industry, and students.
* Save resources by moving content creation, management, and updates to the Center’s team instead of outsourcing it to an outside web professional.
* Develop a way to analyze user traffic, bounce rates, page views that make it easier to evaluate website effectiveness.
* Take advantage of all the innovative and creative tools and applications that make a website more accessible, inviting, and user-friendly.

The main goal is to provide access to valuable information to our state’s CTC Information Technology (IT), Computer Science (CS), and Business Technology (BT) educators so they can:

* Stay abreast of current changes in the ICT space;
* Keep current with issues regarding technology;
* Understand how workforce evolving needs affect development of college programs, curriculum, and ultimately impact the career pathway of the K-20 student;
* Learn how the CTC system can help educators implement change through professional development training, keep current on emerging technology trends, as well as connect with each other to share best practices and learn from each other; and,
* Continue educator collaborations to fulfill their mission to graduate students who will either successfully enter the workforce or articulate to a four-year institution.

**Website Data:**

* **6,211 visits between September 2009 and June 2010.**
* **51% bounce rate which is the total number of visits viewing one page divided by the total number of visits (60% and below is an indicator of “success”).**
* **4,767 or 77% new visitors since the date the website was officially launched September 1,2009**
* ***Average time on site/Unique Visitors:* 2.22 minutes/6,211 visits in the last nine months (Note: To give a context the number six and number ten position are at 13.13 and 10.07 minutes respectively with 154,103 and 118,491 in one month).**

Top 10 Global Web Parent Companies, Home & Work

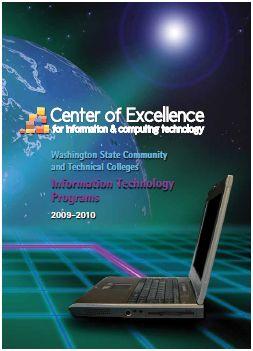
**February 2010**

|  |  |  |  |
| --- | --- | --- | --- |
| Rank | Parent | Unique Audience (000) | Time Per Person (HH:MM:SS) |
| 1 | Google | 360,420 | 2:06:48 |
| 2 | Microsoft | 319,131 | 2:38:46 |
| 3 | Yahoo! | 235,656 | 1:47:15 |
| 4 | Facebook | 220,596 | 5:52:01 |
| 5 | eBay | 159,778 | 1:33:00 |
| 6 | Wikimedia Foundation | 154,103 | 0:13:13 |
| 7 | AOL LLC | 122,482 | 1:55:37 |
| 8 | News Corp. Online | 120,253 | 0:42:42 |
| 9 | Amazon | 120,014 | 0:20:17 |
| 10 | InterActiveCorp | 118,491 | 0:10:07 |

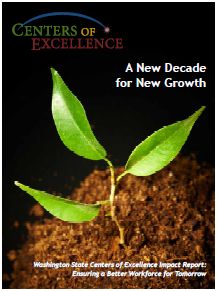
*Source: Nielsen NetView*

**One-Time System Savings: $23,000**

**Ongoing System Savings: $9,108 (12 months X 30 hours per month X $25.30)**

** ICT Program Directory (December 2009)**

The directory was completed in December 2009 and distributed January 2010. It’s available at no cost as a PDF and almost all of the printed copies have been disseminated. The directory devotes one page to each of the 34 CTC’s ICT programs and details the title(s) of the program, a program overview, the technical knowledge and skills students will have gained by the time they graduate, degree and certificate options and who to contact for further information.  Almost 600 copies were disseminated to educators, students, workforce administrators and personnel, and career counselors. This is an excellent resource for career counselors, academic advisors, students, parents and industry to review, compare and consider career pathways leading towards a career as an information and computing technology professional. All CTCs will have an opportunity to submit updates to their program details on an annual basis.  The next call for updates will be December 2011.

**High Impact Report, *A New Center for New Growth: Ensuring a Better Workforce* for Tomorrow (January –February 2010)**

The Center took the lead in developing an impact report to: 1) demonstrate the state’s return on investment; 2) highlight positive achievements; 3) describe individual center impact on the community and technical college (CTC) system as a whole; 4) demonstrate connections made between industry and educators; and, 5) report cost savings by showcasing ten selected Center events, products, projects, research and services.

The report was presented at the Workforce Education Council’s quarterly meeting in Vancouver, Washington on February 11, 2010. Content included an executive summary, Center descriptions, individual initiatives and associated system savings (or, the return on the investment), as well as a vision for 2010-2011. The Center of Excellence for Information and Computing Technology compiled and funded the publication of the Impact Report on behalf of the Centers of Excellence.

** I-Best Curriculum (2009-2010)**

Washington State’s Integrated Basic Education and Skills Training (I-BEST) began as a pilot program at 10 community and technical colleges and has since been implemented in all 34 colleges in the Washington State Board for Community and Technical Colleges (SBCTC) system. The program was developed in response to studies performed by the Washington State Board for Community and Technical Colleges SBCTC that indicated that students were unlikely to complete a long-term basic skills class and then successfully transition to college level vocational programs. The I-BEST model challenges the traditional notion that students must first complete adult basic education or ESL before moving to college level course work. The I-BEST model pairs ESL or ABE instructors with vocational or content area instructors to co-teach college level vocational courses.

The Center posted independently collected and I-Best curriculum provided by SBCTC between September 2009 and January 2010. The following college’s materials are currently on the coeforict.org website: Cascadia Community, Lake Washington Technical, Peninsula Community, Pierce Community, and Seattle Central Community Colleges.

**RESEARCH**

** The Healthcare Informatics (2009-2010)**

Since August 2009 the Center met with the SBCTC, CTC health IT workforce administrators and faculty, and external stakeholders to develop a comprehensive CTC healthcare informatics response to state and national demand. Theproject progressed quickly and successfully. A survey was sent out and completed by all the CTCs regarding health IT curriculum and ARRA health IT initiatives. A [central web-based resource](http://sites.google.com/a/bcc.ctc.edu/wa-ctc-health-it) was created to provide up-to-date information on the health IT initiative.

Thirteen faculty and administrators participated in a two-day train-the trainer program at Bellevue College in November 2009. Curriculum for the 18-credit health IT certificate for dislocated IT workers was completed. Three colleges are offering the new health IT certificate program, as well as the OIT Electronic Medical Record Simulation Laboratory winter quarter 2010, with one additional college planning to offer the certificate program summer 2010.

The Health Informatics Initiative is the recipient of Received $6.1M ARRA award from the U.S. Dept. of Health and Human Services, Office of the National Coordinator for Health IT.  The grants scope includes: Leading a 10-state Community College Health IT Consortium and implementing federally developed Health IT curricula to prepare a workforce for employment in hospitals, clinics and ambulatory care clinics, and support adoption of electronic health records. As part of the deliverables the grant will a) Impact to State of Washington community colleges:  BC COE will disseminate all federally developed curricula and resources, and consult on its implementation to all WA CTC’s; and, b) impact to the State of Washington: 300 learners with a pre-existing IT or healthcare skill set will enter short term (six month or less) certificate training; 80% of those entering training will successfully complete.  70% of completers will be placed in training-related employment by March 31, 2012

 **ICT Veterans Apprenticeship: “Ideal IT Workers, Welcome Back Veterans” Employability Skills Course Development (2009-2010)**

Veterans need jobs. They have a higher technical knowledge skill set due to military training than most CTC students.  They often have “classified status”, meaning they have been vetted as recipients of secret or classified information.  A veteran’s ICT apprenticeship program primary aim is to simultaneously advance positive perceptions of IT CTC graduates by IT employers and grow in-house a new generation of ICT workers. The project deliverables included the development and publication of an e-mentor publication; the creation of the IT Veteran’s Apprenticeship employability skills two- to five-credit course. The curriculum will be uploaded to the Center’s website between June and July 2010.

**Services**

 **ICT Program Consulting (2008-2010)**

**Big Bend Community College**

Big Bend Community College contracted with the Center of Excellence for Information and Computing Technology to audit its Computer Science program (November 2008 – January 2009) and again to redesign its Computer Science program (October 2009 – February 2010).  The second contract delivered the following to Big Bend Community College prior to the February 28, 2010 deadline: 1) 28 master course outlines for the A.A.S. direct transfer degree; 2) two, two-year A.A.S. technical degrees; 3) a two- year academic calendar detailing sequencing for all three degrees; 4) an equipment (hardware/software) infrastructure; 5) an internship process and marketing materials, including two new credit courses; 6) a process for creating and sustaining an effective industry advisory board; 7) and, a strategy for successfully negotiating a direct transfer agreement (DTA) with Central Washington University; 8) and setting up the parameters for a meeting with CWU Computer Science Chair, Dr. Jim Schwing, with a positive outcome leading to a DTA. **System Savings:** **$60,515**

We will have a complete new computer science program on campus with both a direct transfer and Associate of Applied Science degree options (for our students).  (The) goals were met.  (The) project was completed on time with great detail. Questions were asked regarding changes and they were implemented in the report.

Clyde Rasmussen, Dean of Professional and Technical Programs

**Cascadia and Everett Community College**

Cascadia and Everett Community College approached the Center to perform reviews of their Network Technology AAS and Computer Information Technology ATA degrees. Seven industry professionals spent between two and three hours reviewing the degree and course titles and course descriptions. An in-depth labor analysis and research on workforce trends informed two 18-page report which were delivered to each college in May-June 2010. **Minimum System Savings: $10,000**

Ron Wheadon, Dean for Student Learning at Cascadia indicated it was “…It is very helpful." Cascadia’s new program chair, Chris Cuneo wrote, “I just wanted to mention that I appreciate the excellent work on the Cascadia program review.”

 **Information and Computing Technology College Program Review**

The CoE for ICT recruited over 25 information and computing technology industry professionals to review six current state CTC program degrees and certificates. Each review team looked at the composition, title, course titles, and course descriptions for each of the six degrees or certificates submitted. Bellevue, Big Bend, Cascadia, Everett, Lower Columbia, and Seattle Central Community Colleges were not charged for this service. Each college received a report documenting methodology, detailed suggestions for degree or certificate titles, course titles, descriptions, and a high-level industry demand scan. Follow up activities continued through June 2010. See *Appendix I* for evaluative and return on investment data. **System savings:** **$70,100**

This is really helpful and will be put to immediate use as we are in the process of writing program reviews. I am truly grateful and impressed. I'll be interested to see which of the suggestions we decide to incorporate into our program over the next year.

Sharon Buck, Dean of Business and Workforce Education at Everett Community College

# Industry Sector Strategies

* The Center works with multiple ICT industry professionals on the majority of its events, creation of resources, research, and service offerings. Industry professionals from the following companies include: Boeing, Microsoft, Atachi Consulting, the City of Tacoma, Volt, Starbucks, Akvelon, and Click Networks. They work with the Center to review and design curriculum, participate as keynote speakers and industry panelists, make multiple presentations on new trends and emerging technologies, act as sponsors either with in-kind or limited monetary donations on specific projects or programs, and provide guidance and information when making decisions on select Center initiatives and project assessment and progress.
* The industry partnerships developed by the Center have increased in size and quality. The ability to effectively use these relationships for the Center and its constituents benefit has substantially increased. The Center is extremely grateful for its industry partners as they have come through for the Center on multiple occasions, including Big Bend’s CS curricular redesign, the Cascadia and Everett Community College degree reviews, Careers in IT: The Real Story, the Futures Summit (at Microsoft), the ICT Review, and its website.
* The economic impact on what industry can and cannot do has increased opportunities than one would expect. The Center has found industry professionals are more willing to spend quality time in providing advice, reviewing projects, participating on panels, providing resources, making referrals, and attending focus groups since they cannot provide monies. While this has negatively impacted discretionary funding that was made possible through non-state revenues, it has positively impacted the quality, quantity, and value of the human capital that the industry professionals provide. Subsequently, the projects, programs, services of the Center have improved because of more direct access to industry professionals.
* The six center initiative described above represents total system savings of **$283,373**. The cost analysis includes in most cases the value of in-kind donations. Evaluative data including ROI is posted to the Center’s website upon completion of programs and projects. The formula is as follows: Expenditures minus for-profit market value (at least three cost assessments are averaged to create the market value), plus in-kind or cash donations, equals system savings or return on investment. Not included is revenue generated from advisory board participation by Center personnel and additional consulting jobs that are ongoing, which approximates $17,000.
* 400 course outlines were reviewed and created through Center review and consulting projects between November 2008 and March 2010. This activity provided analysis and recommendations to six different CTCs. Two in-progress program review and program redesigns have been completed for two of the six community colleges.
* Industry-generated presentation materials (PowerPoint, video, documents) are made available after programs and projects to the system through the Center website, e-newsletters, and upon request. Examples include the “What is Green IT” PowerPoint presentation; CITE Futures Summit, Careers in IT: The Real World, and the Working Connections. These presentations feature industry speakers who:
  + share industry trend information;
  + explain how to use new applications and programs; and,
  + provide updates on current and projected sought-after technical knowledge and skills which are made accessible in a number of different formats.

Presentations are then published on the Center website and also sent out in digestible formats through e-newsletters and list blasts. Industry professionals also inform the topics that are featured at the Centers annual events, including Careers in IT: The Real Story, the IT Futures Summit, and the Working Connections Institute.

# The CoE and Industry Relationship: How Does it Work?

Industry shapes the work plan primarily because three of the main events produced by the Center are informed and planned in partnership with industry and features multiple industry professionals as keynote speakers, panelists, and presenters. Industry is asked for advice on which topics to include, which training tracks to offer, which text books to select, which industry expert would make the best keynote, presenter, or panelist, if using beta software which industry professional should teach the training track. Industry professionals are heavily consulted in any curriculum or program reviews and are utilized as subject matter experts in any development of new curriculum. Examples include, the ICT review, the Big Bend’s CS program redesign, the Healthcare Informatics initiative, the Cascadia Networking Technology degree review, the ICT apprenticeship veterans’ project, and all events put on by the Center.

The industry advisory board within the last year experienced a severe attrition due to four of the members either being laid off from their jobs or unable to participate. Additionally, the advisory board’s membership will be reassessed as the CoE and the NWCET join the Institute of Business and information Technology (IBIT) organization at Bellevue College. IBIT is a new marrying of the professional business and information technology with the National Workforce Center for Emerging Technologies and the Center of Excellence to optimize resources and concrete possibilities for CTC students. The Center’s progress (including initiatives, activities, and associated processes) have been regularly reported and assessed by the National Advisory Board (NAB) for the NWCET. This input has been consistent two to three times annually.

In the interim the Center has relied upon over industry contacts and partners for fluid and rapid response to Center needs that rely on its ability to swiftly pursue and adapt initiatives. This has allowed for the real-time access to an informal advisory “board” comprised of over 30 industry contacts, partners, advisors, and supporters of the Center. The initiatives the Center considers and implements are always informed by industry professionals, evaluated, and then areas to improve are considered and acted upon based upon feedback and advice. The Center could not deliver on at least 95% of its output if industry was not an active and constructive participant in all decision-making.

The Center’s plan for 2010-2011 is to review all of its industry professionals and align them to the general ICT industry to create a main advisory board. The virtual advisory board website will be developed with a target date of December 2010. The Center will also create in-person and remote sub-advisory boards in IT-enabled emerging industry sectors in Green IT, Health IT, and select specialized industry sectors that are identified within the 2010-2011 Trends Assessment Report aligned to STEM.

# System Collaboration and Cooperation (2008-2010)

A core principle for the Center is to collaborate with, partner with, and provide easy access for its services, events, programs, products, resources to the CTC system. It has partnered with, collaborated with, or served every college in the CTC system that has an information, computing, or business technology program. The projects, services, programs, etc. detailed in the  *Center Strategies* section (page six) demonstrate outreach, access, and shared ownership of what the Center provides with all colleges. The Center has also collaborated or provided services or products that benefit all Centers, regardless of industry sector. Many of the projects or initiatives listed above will continue and this maintains the Center’s commitment to serving the CTC system as a whole. It is of course, contingent upon sustained core and performance funding, and that will enable the Center to continue to do what it does best; enhance opportunities for educators to align curriculum to industry workforce needs to successfully prepare a work-ready graduate or prepare a student for successful articulation to a four-year institution.

The Center has collaborated/cooperated with state CTCs participating, accessing information, using services, advising, and collaborating with the Center through the following events, resources, research, services, and “our community”:

* Careers in IT: The Real Story
* Camtasia and Web 2.0 Videos
* CITE Futures Summit
* CoE for ICT Website
* Green IT
* Healthcare Informatics
* High Impact Report (for WEC)
* I-Best Curriculum
* ICT Consulting
* ICT Program Directory
* ICT Review
* ICT Veterans Apprenticeship project
* Miscellaneous Projects, Services, etc.
* Programs of Study
* Working Connections IT Faculty Development Institute

The Center collected data on the number instances of participation, accessing information, using services, advising, and collaboration with the Center for the 34 CTCs. The graph below (page 20) documents instances of any collaboration or cooperation from April 2009 through March 2010.

26% of overall collaboration/cooperation 3-4 7 or 21%

42% of overall collaboration/cooperation 5-6 17 or 50%

32% of overall collaboration/cooperation 7-13 10 or 29%

With 74% of overall collaboration/cooperation with the CTC system serving 79% of the 34 CTCs identified as housing ICT programs, the Center has accomplished much. However, it intends to ramp up efforts to increase participation and reach out to the seven or 20.5% of the CTCs with three to four out of a possible thirteen instances of collaboration/cooperation.

# The Bridge between K12 and Post-Secondary Systems

The Center has worked to facilitate transitions from the K-12 to the CTC system through the Programs of Study project; Careers in IT: The Real Story; and Working Connections” professional development opportunity for K-20 educators to learn new technologies and form collaborative relationship as they discuss the students transition from K-12 to the CTC system. The IT Futures Summit and the Working Connections Institute are also open to K-12 teachers and increased participation and interest has been particularly striking in the 2009-2010 year.

# Accountability of Centers of Excellence

The CoE for ICT uses its website as a real-time accountability, evaluative, transparent assessment tool. The quarterly and annual reports reflect evaluative and return on investment data.

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# Appendix I: Evaluative and Return on Investment Data

**EVENTS**

**I. Careers in IT: The Real Story (April 2010)**

**Careers in IT: The Real Story**

Date of Event: April 21, 2010; 8:30am-1:00pm  
Location: Carlson Theater  
Host Institution: Bellevue College  
Number in attendance: 420

Survey Results (aggregated averages)

On a scale of 1 to 5 (1 being poor, 3 being average, and 5 being excellent)

**How would you evaluate today’s opening speaker, Dan Waters, Microsoft?**

Usefulness of the information presented              4.52 (90%)  
Applicability to you                                                     4.11 (82%)  
Level of detail                                                               4.62 (92%)  
Overall                                                                            4.63 (93%)

**How would you evaluate the panel discussion?**

Usefulness of the information presented             3.99 (80%)

Applicability to you                                                    3.67 (73%)

Level of detail                                                            4.20 (83%)

Overall                                                                           4.30 (85%)

On a scale of 1 to 5 (1 being unlikely, 3 being possible, and 5 being very likely)

**As a result of attending the session today how likely are you to consider entering an IT- related field?**

Unlikely or fairly unlikely               22%

Possible                                             35%

Likely or very likely                          43%

On a scale of 1 to 5 (1 being poor, 3 being average, and 5 being excellent)

**How would you rate the overall value of the Careers in IT: The Real Story event?**

Poor (1 or 2 rating)                          10%

Average (3 rating)                            13%

Excellence (4 or 5 rating)               77%

**Comments**

* You guys are great!
* Dan Waters was hilarious!
* I really liked how they all shared how they started their careers. I’m really into game programming and design so getting a few tips helped a lot.
* I have always had an interest in technology, and have tried programming before.  I think the event was well presented and very helpful.
* Really like Dan Water’s presentation.  He gave good information out.
* Too much talking on the panel.
* My thoughts on Dan’s presentation were (he is) very well informed and helped me motivate myself to achieve higher goals.
* Thank you for this informative session.  It really helped me rethink my direction in IT careers.
* Thank you for the information about IT. I never thought of technology like this.

**Return on Investment**

Students were provided with a 40-minute presentation and question/answer session with Mr. Dan Waters, Academic Developer Evangelist,  Microsoft Corporation, on working for an IT company, opportunities, career pathway hints on beginning a career in IT, and how a student can make the most of their academic experience.  This was followed by a seven-member IT industry panel (the aim in selecting panelists was their past educational experience as a CTC student) who answered a variety of questions about their careers in IT, educational experiences, and current professional experience.  A question/answer session was facilitated by the moderator, Marcia Williams.  (Note: speakers were not reimbursed for their time or for travel; they donated their time). All students were presented with a black and white copy of the *Information and Computing Technology State Program Directory*.  Finally, there was a drawing for a number of prizes, including a Microsoft X-Box 360.  All prizes were provided by Microsoft (in-kind monetary value of almost $600).  A hot, full breakfast and lunch was provided to the student attendees.  Additionally, transportation and substitute teacher costs were covered for two groups that between them brought over fifty skill center and high school students.   Facility fees were waived as the event was held at Bellevue College.

In reviewing the average registration fees for a comparable event, the fee for a one-day event is between $100 and $250 (average $175).  For a half-day, $90.  Food, in many cases, is not provided.

**Return on Investment Breakdown:**

| Expense | Cost |
| --- | --- |
| Facility | $1,620 \* |
| Food | $4,313 |
| Printed Material | $1,250 |
| Prizes and giveaways | $594\* |
| Travel for bus/subs. | $3,000 |
| Travel/Time (speakers) | $1,000\* |
| Labor | $4,200 ($3,000\*) |
| Total | $15,977 ($6,214\*) |
|  | |

Total expenditures through the CoE totaled $9,763.  In-Kind/Donations totaled $6,214 (denoted by \*) covered 39% of the total costs associated with this event.

If in-kind donations had not been solicited it would have adversely affected the quality of the event, while at the same time increase the total CoE funds needed to cover expenses.  If approximately $50 dollars had been charged to cover actual CoE expenses it would have negatively impacted the budgets of school districts that sent their students (bus, substitute teachers, as well as the actual registration fee), and it would have adversely impacted access for students and school districts who couldn’t afford approximately $1,900 to send 30 students (registration, substitute teacher, transportation).    If students paid a minimum of $90 to attend a half-day event featuring IT industry speakers and panelists discussing careers in IT, it would cost the state and taxpayers approximately $37,800 (based upon the 2010 attendance number of 420).  Careers in IT: The Real Story, at a cost of $23 per participant (this does not include the associated financial value of the in-kind donations), saved $28,037.  Savings are up 80% over 2009.

The event was well attended (to capacity in the venue), well-received (see evaluative data above), and at least 78% of the attendees indicated it was possible, likely, or very likely they would consider pursuing a career in IT.

**II. Green IT Speaker Series (February 2010)**

**How would you evaluate the presentation “What is Green IT”?**

Usefulness of the information presented: 91%

Applicability to you: 75%

Level of detail:85%

**Overall:**90%

**As a result of attending the presentation today, do you have a better understanding of what Green IT is**?

100% indicated “yes”.

**Would you consider pursuing a career in Green IT?**

Not all respondents answered (26%), but of those who answered, 100% indicated “yes”.

**How would you evaluate the presentation “Building Codes”?**

Usefulness of the information presented:73%

Applicability to you: 73%

Level of detail: 69%

Overall: 72%

**As a result of attending the presentation today, do you have a better understanding of what Green IT and Building Codes are?**

66% indicated “yes”.

**Would you consider pursuing a career in Green IT?**

50% indicated “yes”.

**Evaluative Data**

***Sustainable Business Practices***

with Professor Marika Reinke, Chair of Business Technology Systems program at Bellevue College and Dr. Michele Royer, Bellevue College

Date of Event: June 30, 2010; 12-1pm

Location: N201, N-Building

Host Institution: Bellevue College

On a scale of 1 to 5 (1 being poor, 3 being average, and 5 being excellent)

**1. How would you evaluate the presentation, “Sustainable Business Practices”?**

Usefulness of the information presented 84%

Applicability to you 70%

Level of detail 78%

Overall 84%

**2. As a result of attending the presentation today, do you have a better understanding of what sustainable business practices are?**

Yes 95%

No 5%

**3. Would you consider pursuing a career and/or earning a certificate or degree in sustainable business practices?**

Yes 57%

No 43%

**Comments:**

* Impressive!
* Am a current advisor and came to gain information for clarification for students
* The "shareholder vs. stakeholder" side is very hard to see/real with the color conflict
* Presentation was good.
* I would like to hear more real-case and more detail on sustainable business.
* Good to know about sustainable business!
* Needed more about what a sustainable business job entails.
* Awesome information.
* Great!

**III. IT Futures Education Summit (May 2010)**

**Evaluation Data and Return on Investment**

**2010 IT Education Summit: *“Inspiring Faculty for Tomorrow’s IT Workforce”***

*Information Technology Developments:  What Do the Next Five Years Men for You?*

**Friday, May 21, 2010**

**Attendance:  148**

Please rate your satisfaction by filling in the number that corresponds accurately with your response:

1 = Poor, 2 = Fair, 3 = Average, 4 = Good, 5 = Excellent

**Overall Summit**

Overall quality of this event        4.37 (87%)

Educational value             4.27 (85%)

Logistics (registration, confirmation, accommodations, etc.)        4.73 (95%)

**Opening Keynote**

***Information Technology Developments: What Do the Next Five Years Mean for You?*** *–* Jon Perera, General Manager, Microsoft            4.68 (93%)

**Session #1**

***How to Refresh Your IT Program (Microsoft IT Academy)*** – Jeff Johnson, MS Learning Academic Area Lead, Microsoft                    4.17 (83%)

***SharePoint 2010: What’s New*** – Steve Fox, Senior Technical Evangelist, Microsoft 4.23 (85%)

***Web 2.0 Technologies for Your Classroom*** – Jean Kent, North Seattle Community College            4.55 (91%)

**Session #2**

***The Evolution of the Windows Kernel Architecture (Windows 7 and beyond)*** – Dave Probert, Principal Architect, Microsoft                4.05 (81%)

***Online Collaboration (SharePoint 2010, Office Web Apps, Windows Live Services)*** – Lance Baldwin, Business Development Manager, Microsoft        4.16 (83%)

***What’s New? Adobe Creative Suite 5*** – Ron Austin, Bellevue Community College              3.53 (71%)

**Session #3**

***Shared Source, Windows Academic and Faculty Curriculum Resources: supporting teaching and research world-wide*** – Arkady Retik, Director, Technical Faculty Programs, WW Education Group, Microsoft       4.02 (80%)

***Web Design and Development (Expression Studio, Silverlight)*** – Uni Ravindranathan, Senior Program Manager, Microsoft                4.09 (82%)

***Mobile Application Development (Windows Mobile applications***) – Michael Klucher, Lead Program Manager, Microsoft                4.38 (88%)

**Session #4**

***Productivity in the Age of Information Overload (Office 2010)* –** Scott Kennedy, Solutions Specialist, Microsoft  4.72 (94%)

***Virtualization (Hyper V, Virtual PC and Server)*** – Kevin Lane, Senior Program Manager, Microsoft           4.77 (95%)

***Devices are increasingly parts of larger solutions – why is this and how do we adapt?*** – Colin Miller, Product Unit Manager Microsoft            4.17 (83%)

**Comments:**

* An enjoyable summit!  New and interesting ideas that stimulated thinking grabbed my attention and at times excited my futuristic outlook for education.
* Excellent!
* Excellent! As I would have expected.  Very impressive.
* Great sessions; great information and all presenters knew their subjects.
* Learned new technologies and got new ideas.  Great event!
* Lots of great ideas to take back to students. Thanks!
* So awesome!
* So many good choices; it was hard to decide which to attend.
* Thank you for this opportunity to access information from MS experts on MS campus!
* Thanks.  It was really a great day!  We all appreciate all you do to make us welcome.  Great lunch too.
* Very informative.  I especially enjoyed the keynote speaker.
* Very well paced.  An hour per session is good.  Nice mix of college and high school.  Good opportunity to peer network.

**Return on Investment**

Almost 150 (148, enrollment up 18% over 2009) K-20 IT teachers and CTC faculty attended the one-day, free IT Futures Summit at Microsoft.  Faculty began their day with a 60-minute keynote presentation by Mr. Jon Perera, General Manager, Microsoft, who addressed the “*Information Technology Developments: What Do the Next Five Years”*.  His keynote presentation was extremely well-received and historically one of the best rated.  Mr. Perera also had time for a brief question/answer session.  Then participants were able to attend four of twelve sessions, in one-hour blocks.  Networking opportunities were available to attendees during the one-hour luncheon.  Finally, there was a drawing for a number of prizes, including one Microsoft IT Academy Program memberships (a $1,500 value), BC Foundation-sponsored prizes totaling $658, and flash drives.   Total in-kind monetary value of giveaways was $2,159**.** In-kind was the facility rental fee ($2,101) which was waived as Microsoft sponsored the event.  Breakfast, snacks, and lunch were provided for all participants.

In reviewing the average registration fees for a comparable event, the fee for a one-day event is between $250 and $650 (average of five different conferences is $400.)  Food is in some cases not provided.

**Return on Investment Breakdown:**

**Actual Expenses**

Facility                                             $2,332 ($2,101\*)

Food                                                 $4,480

Printed Material                               $1,000

Prizes and giveaways                     $2,159\*

Travel/Time (speakers)                 $2,250 (1,250\*)

Labor                                                $6,500 ($5,000\*)

**Total                                                 $18,721 ($8,351)**

Total expenditures through the CoE totaled $10,370.  In-Kind/Donations totaled $8,351 (denoted by \*) covered 45% of the total costs associated with this event.

If in-kind donations had not been solicited it would have adversely affected the quality of the event, while at the same time increase the total CoE funds needed to cover expenses.  If approximately $70 dollars per attendee had been charged to cover actual CoE expenses it would have negatively impacted CTC professional development dollars available to faculty and it would have adversely impacted access for faculty whose respective colleges couldn’t afford approximately $200 to $400 to send between three and four faculty to the Summit.    If faculty paid a minimum of $400 to attend an alternate, one-day event featuring IT industry speakers, panelists, subject matter experts discussing and demonstrating new IT products, emerging technologies, how to use them in their classroom, and advice on how to update IT programs to meet changing industry needs, it would cost the state and taxpayers approximately $59,200 (based upon the 2010 attendance number of 148).

The IT Futures Summit at a cost $110 per participant (this does not include the associated financial value of the in-kind donations), saved $48,830.

**IV. Working Connections IT Faculty Development Institute (August 2009)**

***Evaluative Data***

The Institute’s faculty advisory board and CoE for ICT measure the success of the Institute in a number of ways.  The primary measure of success is did the professional development training tracks meet the needs of the participants?  Other measures of success include:

* the overall Institute’s operational activities (registration, food, hotel, classroom set-up, etc.);
* will faculty participants attend a future Institute?
* was the Institute a good use of their time?

The Institute evaluation was made available online for all participants this year.  Previously the evaluations had been distributed to participants as hard copies.

**Overall rating of Working Connections. The program met my expectations.**

The average rating was 4.79 or 96%

**I will recommend Working Connections to colleagues in the future.**

The average rating was 4.89 or 98%

***Return on Investment Data***

38 participants (CTC faculty and high school teachers) attended the four-day, $450 Working Connections IT Faculty Development Institute.  Participants began their four-day professional development training with registration, lunch and the welcome and opening ceremonies.  They then went to the specific training track they registered for and began their Working Connections experience.  Over the four days, Institute participants completed almost 25 hours of instruction.  They also attended lunch time sessions on Microsoft’s Adult Learning Program (Kelley Anderson, Microsoft), Windows 7 (Adam Carter, Microsoft), SharePoint (Steve Fox, Microsoft), and Camtasia, Snagit & Jing (Jean Kent, North Seattle Community College emeritus).   The lunchtime presentations highlighted what participants were “missing” as the other track content was exceptional and of interest to other participants.  The week ended with closing ceremonies.  Total in-kind monetary value of giveaways was $2,050. Facilities are not charged for the four labs, the auditorium (N201), catering room (N206), and the break room (A265) because the event is hosted by Bellevue College.  Breakfast, snacks, and lunch were provided for all participants.

In reviewing the average registration fees for a comparable event, the fee for a week long training event (professional development) is between $930 and $3,000 (average of five different non- and for-profit training events, or $1,500).  Additionally, Windows 7 training is not even available right now, so the instructor provided the MOC for the course gratis, and thus the participants were afforded a one-of-the-kind experience they couldn’t find anywhere else. Food is in some cases not provided and the training is for three days, not four.  Total revenue generated from the $450 tuition was $13,950. (Technical support was provided for each computer lab in return for participating in the track).

**Return on Investment Breakdown:**

*Actual Expenses*

Facilities: $7,620\*

Food & Beverages: $9,000

Printed Material/Supplies: $3,000

Prizes & Giveaways: $2,050\*

Textbooks: $9,800\*

Travel/Time (speakers): $1,250\*

Instruction: $12,750

Labor: $2,500

**Total:** $47,970 ($20,720\*)

Total expenditures through the CoE funding totaled $27,250.  In-Kind/Donations totaled $20,720 (denoted by \*) covered 43% of the total costs associated with this event.

Total expenditures through the CoE funding totaled $27,250.  In-Kind/Donations totaled $20,720 (denoted by \*) covered 43% of the total costs associated with this event.  If in-kind donations had not been solicited it would have adversely affected the quality of the event, while at the same time increase the total CoE funds needed to cover expenses.  Thus, in-kind contributions allowed the Center to offer the Institute without incurring additional cost to the Center or passing the cost on to participants.  If faculty paid a minimum of $1,500 to attend a similar for-profit, private company’s professional development four-day ICT training it would cost the state and taxpayers approximately $46,500 (31 X $1,500 = $46,500). **The Institute at a cost $450 per participant saved $5,300.  If in-kind donations are included, the savings increases to $26,020**

**RESOURCES**

**I. CoE for ICT Website**

The website content management system allows information to be updated more efficiently, and reduces the reliance on a webmaster to update or change content at $25.30 per hour over a nine month period at approximately 30 hours per month. Thus, labor costs are reduced. Due to the fact that the personal service contracting was frozen, the CoE hired Bellevue College web designers to perform the work. This reduced the amount of money it would have cost by using in-house contractors. Cost savings: A minimum of $23,000

***Return on Investment Breakdown***

**Expenses**

Labor $11,000 (flat fee, actual hours were 420 over a five month period)

Photos $50

Domain $15

**Total:** $11,055

In surveying commercial hourly rate, the average hourly rate is $85. $85 X 405=$34,425. Subtracting the Center expenses of $11,055 saves a minimum of $23,000 ($23,370 actual).

**One-Time System Savings: $23,000**

**Ongoing System Savings: $9,108 (12 months X 30 hours per month X $25.30)**

**SERVICES**

**I. Information and Computing Technology College Program Review (December 2009)**

**Did the ICT review align with your expectations of what the process and final product, the report, would be?**

“Yes”, 5 out 5, or 100%

**Comments:**

* Complete and very detailed
* The process was very streamlined and efficient; we heard almost immediately that our application had been accepted. The panel's review was specific and we continue to review the suggestions they made for our Web program in order to audit our curriculum. This has been a very helpful and engaging process.
* (Yes), with exception of feedback related to job outlook in our region.

**On a scale of one to five, with one being "Not at all" and five being "Very", how useful did you find the report, with the analysis of program titles, course titles and descriptions, and high-level employment scan?**

4.6 or 92%

Note: “5” given by all 3 Workforce administrators and “4” given by the 2 faculty respondents.

**In reviewing the report, what specifically did you find helpful and what specifically did you not?**

* How the "outside" community found some of the available information confusing.
* The recommendations in the report were very well phrased, and they tied directly with outcomes highlighted in our curricula so we did not have to do any detective work to figure out correlations.
* High level employment scan was not as useful.

**Upon review of the report, did your college decide to take action, based upon recommendations and analysis?**

“Yes”, 3 out of 3

“We are still studying the report with our faculty”, 2 out of 2

**If your college has decided to take action can you share this information with us, in the broadest of terms, so we can share this information without compromising your internal college decision-making and action processes?**

* It hasn't been done, yet; probably a summer task.
* We are developing the action plan.
* We will have a complete new computer science program on campus both a direct transfer and associate of applied science degree options
* Certainly, once it is available.
* Will use as part of formal program review, especially titles and descriptions feedback, and areas of course specific weakness.

**Finally, is there anything you would like to share, suggest, or provide feedback on the process with us? We were requested by one of the participating colleges to consolidate the six review findings within a broad report that can be utilized by the entire CTC system, without sharing any detailed information about your review. This report should be coming out by the end of April 2010. Is there anything else we can do to assist you? We are available to provide in-person feedback or mentoring upon request, at no charge.**

* I thought the review was useful as it provided a perspective of what was "unclear" in our programs to them, but "clear" to us.
* We liked the report so much that we have decided to contract with Center of Excellence for ICT for our Networking program.
* Goals were met. Project was completed on time with great detail. Questions were asked regarding changes and they were implemented in the report.
* Thank you for providing this service!
* Perhaps the overview package could be clearer on what the report includes. Occasionally we wondered if we should be doing more in relation to how where we were in the process. (**Note:** This faculty member was contacted twice and invited to discuss the report’s findings and did not pursue this offer.)

**Return on Investment**

***The ICT six college program (degree/certificate) review’s costs are as follows:***

$1,125        15 of the 26 ICT industry professionals accepted the $75 stipend for their two- to three- hours of service.

$2,650        Personnel costs for two facilitators to work with three of the six teams.

$500           Food and beverages provided for ICT reviewers

$600           Facilities (in-kind as hosted at Bellevue College)

$25             Printing & Materials

**$4,900        Total**

If each college had done an independent ICT review for a program degree or certificate, it would have entailed the minimum following hours per task (does not include the mentoring, advice to continue through May 2010):

* 2 hours to meet with and understand client needs
* 24 hours to develop a process, including reviewing the current program
* 8 hours to recruit, outline expectations, and confirm for the review a minimum of four ICT professionals
* 5 hours to prepare, facilitate review, and ensure payment to ICT industry professionals
* 8 hours to transcribe ICT review team recommendations, verify validity of recommendations, research workforce demand, and prepare report
* 3 hours to follow up, vet the report, create an evaluative process, and communicate/follow-up with the college and ICT industry professionals

***50 hours at $250 per hour = $12,500***

**X 6 colleges = $75,000**

\* 94% cost savings for the taxpayer, or $70,100.  This does not include the changes the colleges might make if they implement the recommendations and increase a) enrollments; b) student satisfaction; c) increased employment and/or articulation.  This will be assessed in 2010.

**II. Big Bend Curriculum Redesign (December 2009-February 2010)**

The Big Bend Community College (BBCC) Computer Science redesign:

$2,000 Subject Matter Expert review, validation of 36 master course outlines and review of program structure

$500 Equipment, software, lab cost analysis

$16,975 192 hours at $75/$100 per hour depending on type of deliverable

$115 Food and beverages provided for 5 hour final master course outline meeting (meals/meeting)

$620 One trip to BBCC for final presentation of materials; one trip to Central Washington University for direct transfer agreement meeting

$25 Printing & Materials

$0 Two ICT Reviews on December 4, 2009 (included in the financial analysis for the ICT Review)

**$20,235 Total**

If Big Bend Community College had hired a for-profit consultant to redesign its computer science program, create 36 master course outlines, an internship process and marketing materials, a two year academic course schedule, create an advisory board process, and negotiate a DTA, without having an intimate understanding of the CTC system and how it operates expenses would have resulted in:

***323 hour (or, eight weeks) at $250 per hour = $80,750***

\* 75% cost savings for the taxpayer. This does not include additional travel, materials, and printing costs for a for-profit consultant.

**III. Cascadia and Everett Community College (May – June 2010)**

Cascadia and Everett Community College approached the Center to perform reviews of their Network Technology AAS and Computer Information Technology ATA degrees. Seven industry professionals spent between two and three hours reviewing the degree and course titles and course descriptions. An in-depth labor analysis and research on workforce trends informed two 18-page report which were delivered to each college in May-June 2010. **Minimum System Savings: $10,000**

Ron Wheadon, Dean for Student Learning at Cascadia indicated it was “…It is very helpful." Cascadia’s new program chair, Chris Cuneo wrote, “I just wanted to mention that I appreciate the excellent work on the Cascadia program review.”