

Pathways to Careers:
Directional Plan for
Linking Postsecondary Completion to High Demand Jobs

July 22, 2011

Eighty-eight million adults currently in the workforce (57 percent) have low literacy, limited English proficiency or lack an educational credential past high school....Furthermore, two-thirds of people who will be in the workforce in the year 2020 were already working adults in 2005—long past the traditional high school-to-college pipeline.¹

I. Framework for Postsecondary Completion:

Last October's Education Summit reaffirmed the need to dramatically improve education outcomes so that all of our residents can achieve career success and participate in growing the region's economy. An outgrowth of this Summit is the *Pathways to Careers* Initiative to increase educational attainment with the immediate goal of preparing skilled workers in targeted industry sectors toward the longer-term goal of growing our economy and achieving shared prosperity.

The goals of the *Pathways to Careers* Initiative, particularly to double student completion of education/training pathways with labor market value, are aligned with Seattle's Roadmap to Success and the interests of employers, labor, community-based organizations, funders, policy makers and researchers in completion-focused, community college reform. These goals are also aligned with the goals of the Seattle Community College District to achieve transformative change that assures that the college system fully delivers on its mission to serve the Seattle community through significant improvements in completion rates. Achieving these complimentary goals will require the building of intentional linkages between funders, community partners and the Seattle Community College District (SCCD).

As a collaborative-driven completion initiative, *Pathways to Careers* seeks to create system reform at all levels that will result in both scale of implementation and sustainability of success rates. To reach significant improvement in program completion for targeted sector jobs, change will need to occur at all stages along the student pathway from recruitment to program completion. Sustainability will likely require a new look at college policies, streamlining and closer coordination of practices and student protocols, deep and meaningful engagement by college faculty, staff and administration, and clearly defined and aligned roles for community partners. By initially focusing on four high-demand sectors, *Pathways to Careers* provides a phased mechanism to collectively review and improve the total student experience from recruitment to graduation. *Pathways to Careers* also provides a mechanism for SCCD to build on its collective work in completion reform, as outlined in its Completion by Design proposal to the Bill and Melinda Gates Foundation, and in achieving the Washington Achievement Initiative's success metrics. These related reform efforts are an important connection between the *Pathways to Careers* sector initiatives and SCCD's vision for dramatically increasing student completion rates for low-income students.

II. Background

Now, more than ever, education and training beyond high school is the gateway for good paying jobs for struggling individuals and families. A recent report by the Georgetown University Center on Education and Workforce found that by 2018, nearly two-thirds of jobs in the U.S. will require at least some college. At the same time, a staggering 61.8% of all working-age adults in Washington have no college degree.²

Research on student success shows that low community college completion rates are impacted by a range of complex issues involving both the student and the institution and improvement calls for solutions that are systemic and touch

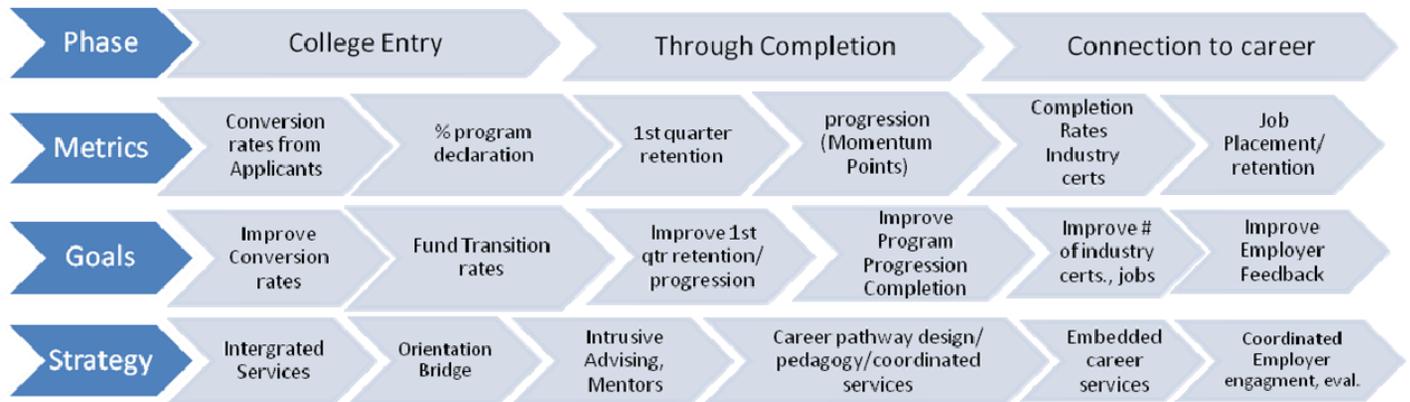
¹ National Skills Coalition. *The Issues: Every-Worker*, <http://www.nationalskillscoalition.org/the-issues/every-worker.html>

² *Washington Profile of Adult Learners* (2008), The Council for Adult and Experiential Learning

upon all parts of the institution, as well as outside support networks. Discrete programs and “work-arounds” are insufficient to impact a large number of students.

“Rather, colleges need to implement a “best process” approach in which faculty, staff, and administrators from across the college work together to review programs, processes, and services at each stage of the students’ experience with the college and rethink and better align their practices to accelerate entry into and completion of programs of study that lead to credentials of value. The effect of this redesign process should be to strengthen pathways to program entry and completion.”³

The Community College Success Matrix illustrates this idea of implementing both the best practices and best processes in a systemic way to address the critical loss and momentum points in a students’ education:



III. Pathways to Careers

Following last October’s Education Summit, government, community and education leaders in Seattle have come together to design a unique alignment of interests and resources toward the improvement of the Seattle economy through educational attainment. The Seattle Office of Economic Development (OED) has joined with the Seattle Community College District and a range of community partners in the development of *Pathways to Careers*. This initiative aims to create a citywide coalition that leverages community resources toward the goal of significantly increasing credential completion by low-income or low-skilled workers preparing for targeted high-demand jobs in Healthcare, Business Technology, Trade/Logistics and Manufacturing/Industrial Skills.

A. Occupational Clusters

The partners determined that a sector approach to systems reform provided a focus approach for reorienting colleges toward clear and intentional training pathways for students while immediately responding to the employment needs of low-skilled, low-income students and the labor market needs of high growth occupations. In selecting sectors of focus, the group considered:

- Clusters that have a regional competitive advantage.
- Clusters that are demonstrating employment growth including employment demand from retirements.
- Clusters that have middle wage occupations and potential career ladders from entry level positions to higher skill positions.
- Program clusters with the ability to provide a career ladder or series of stackable credentials
- Clusters where partners in the program are already doing foundational work, but with an ongoing need to close the training gap.

Based on this assessment, the *Pathways to Careers* Initiative focuses on the occupational clusters described below:

³ *Get with the Program: Accelerating Community College Students’ Entry into and Completion of Programs of Study*, Davis Jenkins, CCRC Working Paper No. 32, April 2011

- **Business Operations and Administrative Support:** The greatest number of actual job openings is projected to be in business operations and administration support occupations, with over 26,000 jobs by 2020. This cluster includes the job titles of executive secretaries and office managers, sales managers, buyers, and purchasing agents. With the increasing reliance on information technology and communication systems, most of these positions will require some postsecondary education. These occupations are also cross cutting, and found across every major industry sector, including the sectors targeted here. The current average wage for these jobs is over \$24/hour.
- **International Trade Transportation Logistics:** With 2 major ports, Transportation and Distribution provides opportunities for sustained growth of middle wage jobs. There are significant numbers of entry level jobs on the Transportation/Warehousing/Distribution side, but advancing to other managerial and technical positions usually require some additional vocational or university training to qualify. With Port Jobs, SkillUp and SCCD, we are looking growth potential in middle wage jobs - technical maintenance, operations, logistics, and distribution. These categories represent over 17, 000 new jobs through 2020, with an average wage of \$23.56. There is some overlap with 'industrial skills' in the technical maintenance occupations.
- **Manufacturing or Industrial Skills:** Manufacturing continues to play an important role in Seattle's economy that cut across a wide variety of industries, including marine, transportation, construction and aerospace. The focus in this sector is to build an industrial/manufacturing training pathway to build core competencies in safety, blue print reading, electronics and machining/industrial processes that can feed into more specialized training. The jobs that are associated with specific community college courses with over 9,000 projected opening within the next 5 years with an average hourly wage of over \$25/hour. For this project, we concentrated on those middle skill occupations in highest demand.
- **Healthcare:** This occupation pathway will focus and build on the career pathways developed by SEIU, who represent incumbent healthcare workers statewide. Considering home health care alone there are currently more than 50,000 home care workers in the state of which more than half are in our region. By 2030, it is estimated that the need will grow to 77,000 home health care workers statewide. This training pathway is focused on advancing the skills of these incumbent workers to qualify them for employment as medical assistants (average wage \$16/hr) to RN (average wage \$35/hr).

B. Increasing Student Success

The table below charts the scale of opportunity in each of these four pathways; these are conservative estimates concentrating on only the highest growth occupations with correlated existing course offerings. Within these four occupational pathways, the total number of students who exit programs related to the occupational clusters from SCCD over a three-year period is also calculated. The number and percentages of students achieving various academic outcomes is summarized in the table below:

Pathways to Careers Training Opportunity Summary

Occupational Clusters	Employment 2011	Growth	Opening through 2020	Training completion (2011-2020) ¹	Skills Gap	# SCCD enrolled 2009-2010	# of students that began in 2006-07	% of 2006-07 starting cohort earning credent. in < 3 years
Business Operations and Administration	93,848	6.29%	26,430	11034	-15396	410	208	42%
International Trade, Transportation, Logistics	66389	4.3%	17994	2889	-15521	446	201	27%
Manufacturing/ Industrial Skills 2	5,128	11%	1064	720	-344	296	166	31%
Medical Assisting and related	12,370	30.13%	5,199	772	-3219	360	128	48%

¹ This represents the total training completions based on 2009 data from King County, and as such is likely to be a much lower number in the ensuing years due to state budget cuts. SCCD completions are a subset of this, and are shown on a following table.

² This represents those demand occupations for which there is also training available in SCCD based on CIP codes. *This does not include Aerospace.*

This data clearly evidences the need to dramatically improve these student outcomes, and thereby better serve the regional industries that rely on our colleges for their current and future workforce. In order to meet the *Pathways to Careers* **goal of doubling completion rates in these training pathways**, achieving that result will require intentional linkages in the policies, partnerships and practices that make up the total student experience from recruitment to graduation. It will also require the enhancement of the college's data collection system and a careful analysis of the "leakage" points from entry to completion as outlined in the Student Success Matrix.

C. Framework for Student Success

Throughout a student's pathway from applying for college to completion of a degree or certificate, there are many 'transition points' that impact the likelihood of success. These transition points are the basis for the Washington Achievement Initiative and all Washington State community colleges including SCCD are closely tracking student progress at these key milestone points in their college progression. These transition points are the focus for our interventions along the student's pathway, so they can transition from one step to the next through to completion.

1. Pre-Entry to College Entry

Transitioning from recruitment or interest through the admissions process to enrollment is itself the first opportunity for intervention. Many students, especially first generation and/or ESL students are daunted by the many steps needed to get admitted, assessed and enrolled. The financial aid process is a complex and difficult one for students unfamiliar with college. Filling out forms, like the FAFSA, become themselves a barrier. Understanding what is expected of a student ('college knowledge') and how to choose a career pathway are critical transition elements. The SCCD is beginning to address this issue by institutionalizing 'Start Next Quarter' which provides 8 hours of information about how to succeed in college. *Pathways to Careers* also advances

college knowledge by facilitating peer learning and information sharing through a cohort instructional model. Better integration of Community Based Organizations (CBOs) support of students with this first transition is another method for augmenting the resources needed to ensure that students are retained to completion.

Goals	Program Design Strategies
<ul style="list-style-type: none"> • Increase in CBO assisted admissions • Increase in high school graduates who enroll in the first fall. • who have early assessment in the high school or assessment prep prior to testing • Increase in number of enrolled students who: <ul style="list-style-type: none"> ○ attend orientation ○ successfully complete assessment testing ○ complete the FAFSA ○ obtain Pell grants for those who are eligible ○ declare a major ○ enroll in specific program courses 	<ul style="list-style-type: none"> • Compass testing in high school that allows for early intervention. • Mandatory orientation, • Batching registration and enrollment information & requirements (e.g. cut off scores for assessment) consistently across student cohorts and college
<p>Increase number of students who are assigned a mentor or counselor with access to wrap around services in the program of study</p>	<p>Providing case management and/or college navigation</p>

2. Progression to Completion

More students are lost during the first quarter of college than at any other time. Studies indicate that understanding the career path, and the steps along the path; critically impact a student’s success. Low rates of progression from developmental to college level coursework contribute significantly to student attrition at this juncture in their path. Students are not admitted to college level coursework until they can reach certain levels of math and English -- levels which are often inconsistent across the District. Current research indicates that helping a student quickly remediate any academic deficits and making that developmental work relevant to the student and their course work significantly increases success.

Low rates of completion also reflect pressing problems as the student first navigates college life. These include a combination of inadequate advising to ensure that students take the correct courses to actually earn a credential, and complicated and confusing program designs with many certificates and scheduling hurdles.

Goals	Program Design Strategies
<p>Increase in:</p> <ul style="list-style-type: none"> • Percentage who declare program of study. • Percentage who enroll in targeted program courses • Number of student who meet attendance requirements <p>Increase in first quarter retention rates</p>	<ul style="list-style-type: none"> • Adequate college advising/navigation • Unambiguous program of study • Accelerated and contextualized alternatives to traditional developmental or academic catch up courses (such as contextualized curriculum and “boot camps”). • Tracking student progress and flagging interventions needed
<p>Increase in stackable student entry points along a training/education pathway</p>	<ul style="list-style-type: none"> • Articulated, sequentially arranged course content • Stackable, certified course design • Industry-recognized certificates

3. Connection to Career

The last transition point is ensuring students get the skills, including “soft” skills, needed in the labor market. A recent business survey by the Workforce Training and Education Coordinating Board found that even with the large number of unemployed Washington residents, 17% of the state’s employers had difficulty finding workers with occupation-specific skills. According to the Board, this translates into 28,000 employers who had difficulty filling their job vacancies. The impact is many jobs unfilled or potentially outsourced, and the lost opportunity for business growth. It is critical that the labor market needs steer education offerings to increase the employment opportunities for our residents.

The labor market relevance of education programs is at risk without coordinated and effective employer engagement. Employer investment in workforce education dwarfs any other funding source, and any strategy of scale will fail without adding this component to the career development framework. Educational components that are linked to employer required competencies and that are accompanied by an industry-recognized certificate benefits students who need immediate employment, as well as employers.

Goals	Program Design Strategies
<ul style="list-style-type: none"> • Job placement in related field, and retention & wage for completers and leavers • Number of students who return for additional stackable certificates or degree 	<ul style="list-style-type: none"> • Work-based learning “capstones” or internships • Coordinated employer outreach and placement • Student employment tracking included in student data base
<ul style="list-style-type: none"> • Increased employer engagement and participation in design and implementation of training pathways • Ongoing assessment of employer satisfaction 	<ul style="list-style-type: none"> • Curriculum aligned with Industry certification • District wide technical advisory councils

D. Program Design

Each sector group has met to inventory the career/training pathways available to close the skills gap in the targeted occupations. The teams then completed the analysis and crosswalk of targeted jobs to determine alignment with specific programs at SCCD. This analysis included an assessment of program capacity, current completion rates, content and delivery strengths and challenges, and the progression of stackable credentials leading to and from the program. They also considered the degree of industry engagement, as well as the wrap-around/navigation services available to support the progression of students from training to career.

Based on this inventory of “what is”, the sector groups have identified the program enhancements necessary to close the skills gap that addresses new program development, program enrollment capacity and/or program completion rates.

COMMUNITY COLLEGE SUCCESS COMPONENTS				
SECTOR TRAINING PATHWAYS	SUMMARY	COLLEGE ENTRY	THROUGH COMPLETION	CONNECTION TO CAREER
MANUFACTURING/INDUSTRIAL SKILL				
Strategies	Provides an alternative entry and pathway to college for those testing below college ready.	Cohort, batched entry, financial aid process, wrap around coordination	Incorporates career exploration, industry certifications, hands-on instruction and work-based learning is labor intensive	Employer Education & Outreach to accept NAM curriculum and certifications, Internship capstones facilitated by Trade Association, Coordinated employer engagement through a single source of contact
BUSINESS OCCUPATION				
Strategies	The sector training pathway becomes the District-wide BTEC program. incorporates the development of integrated basic skills and developmental education within the Business Program	Cohort, batched entry, financial aid process, wrap around coordination. Prior learning Assessment	Common & Enhanced Credit for Prior Learning; Block & Weekend Scheduling; Hybrid Delivery; Enhanced Support Services; Cohort Model	Student Capstone Project & Internships; Post-Completion Job Placement and retention wrap-around services. Coordinated employer engagement through a single source of contact
TRADE & LOGISTICS				
Strategies	Integrates Basic Skills/ABE/ESL with contextualized credit-bearing certificates designed to meet scheduling needs of low-wage workers attempting to enter career pathways in Transportation and Logistics TBD			This project will mostly be evaluative to help define the Pathway with area employers. A coordinated employer engagement strategy is planned
HEALTH CARE				
Strategies	Support training pathways developed by SEIU NW Healthcare Training Partnership & 1199, to medical assisting and related competency areas Credit crosswalk between a Training Partnership program and at least one college-based career pathway program TBD			Linkage through Training Partnerships

IV. Continuing Framework for Student Success: Pathway to Completion

As a collaborative-driven completion initiative, *Pathways to Careers* seeks to create system reform at all levels that will result in both scale of implementation and sustainability of success rates. To reach significant improvement in program completion for targeted sector jobs, change will need to occur at all stages along the student pathway from recruitment to program completion. SCCD proposes to apply the learning from *Pathways to Careers* to develop *Pathway to Completion*. It will build on the foundation built by the sector pathways and in SCCD's previous work on the development of the Completion by Design proposal, the momentum point tracking in the Washington Achievement Initiative and the participation of Washington trustees in the recent Governance Institute for Student Success. The goal of *Pathway to Completion* is to build an engagement framework that moves reform to scale to all campuses within SCCD and Tacoma Community Colleges (TCC). It will also provide a model for scaled reform in other WA technical and community colleges.

Pathways to Careers initial sector focus provides an opportunity to collectively review and improve the total student experience from recruitment to graduation for future scale across the college system. Integrating the best practices and processes for each of the targeted sector pathways so that they lay the groundwork for improving completions for all SCCD students will require multiple levels of activity for each of the *Pathways to Careers* partners.

A. PRE-ENTRY/ENTRY: Streamline Recruitment and "Front-door" Experience

To move to sustained improvement, SCCD will engage college student services staff, students, CBOs and public school partners to improve the process of approaching and connecting to the college. This involves:

Stronger Alliances with High school Partners

- i.** Scale early assessment for all feeder high schools
- ii.** Streamlined transition from high school vocational programs to target programs
- iii.** Increase in first fall enrollment by high school graduates
- iv.** Initiation of "College Ready" connections to reduce students testing into developmental education

Align and Streamline the Process for Recruitment & Entry into the College and Programs:

- v.** Engage the college community and CBOs in a focus group analysis of the Recruitment & Entry Process including: CCSSE data, leakage point data & wide input to redesign the entry, assessment and financial aid process to improve the success of student completing the entry process and qualifying for Pell.
- vi.** Develop a plan to scale **Declare and Prepare** to implement intentional entry requirements as outlined in SCCD's Completion by Design proposal. This effort will be accomplished in collaboration with TCC.
 1. Required assessment prep and or early assessment
 2. Required advisor visit to determine major and enrollment plan
 3. Required Student Orientation
 4. Required enrollment in Student Success course
 5. Required and monitored class attendance

B. PROGRESSION THROUGH COMPLETION: Accelerate Developmental Education Completion

Build on the work at TCC to implement a dashboard system within SCCD as proposed in Completion by Design proposal. The tracking system and dashboard will integrate the tracking of student progress with Washington Achievement Initiative metrics, identify specific leakage point interventions and develop a plan for student assistance with clear & appropriate roles.

- i. Engage College faculty in a Developmental Education Retreats:** Engage Developmental Education and Gatekeeper course faculty from SCCD and TCC in series of meetings or retreats to review student data, research and best practice with an emphasis on acceleration of progress through or around the current developmental education sequence. Based on this review, 2-3 focused strategies will be identified for implementation across the two college districts. Included in these retreats and follow-

up meetings will be a range of acceleration results, contextualization, and targeted interventions based on student level including intensive options for students needing significant catch-up.

- ii. **Implement a jointly applied acceleration strategy across SCCD & TCC.** Based on the retreats and follow-up meetings with faculty, the two districts will apply at least one developmental education acceleration strategy to significantly improve student progression through the academic preparation and on to major. This work will build on the best practice resulting from research on I-BEST showing that contextualized, cohort enrollment and accelerated learning improves success
- iii. **Improvements in the District's data system** to assure cohort, program and initiative tracking and intervention. This data improvement is necessary to be able to flag students within range of completion, complete degree-audits, and provide for automatic credential awards. Analyze program structure to assure stackable credential attainment & auto-generation of credential awards. Provide a tracking system that applies the Washington Achievement Initiative data to program progression.
- iv. **Develop a program for systemic, district-wide college engagement** focused on clear completion goals. This two-year engagement strategy will include board members, administrators, faculty, staff, and students in seeking strategies to achieve the vision of improved completion
- v. **Expand the use of data to toward systemic improvement of completion.** Apply the use of college data, Community College Study of Student Engagement (CCSSE), Washington Achievement Points and other data to the systematic review and improvement of student progression at each step of the college experience from recruitment to completion.

C. CONNECTION TO CAREERS

- i. **Complete the analysis and crosswalk of targeted jobs** to determine alignment with specific programs at SCCD including program capacity, current completion rates, content and delivery strengths and challenges, and progressing of stackable credentials leading to and from the program.
- ii. **Enhance employer engagement** through district-wide technical advisory committees.

D. ALIGNING RESOURCES FOR SCALE & SUSTAINABILITY

As a city-wide partnership between government, community organizations and higher education, the immediate and long term education reform goals will require a leveraged approach to resource development with a goal of increased sustainability. Initially, important resources are being leveraged in the following ways:

- o **Office of Economic Development:** Initial resources to identify pathways, identify barriers and leakage points, coordinate CBO support and initiate program development, enhancement and capacity building.
- o **CBOs:** By closer coordination with the college system and each other, CBO impact is maximized and redundancy of effort and resources can be reduced. Some CBOs and community/governmental entities will support students' direct financial needs and stretch financial aid and college support dollars
- o **Washington Achievement Initiative:** Important benchmarking tool to track and measure improvements for students most in need. This data will provide rich information in identifying leakage points and opportunities for the improvement of outcomes
- o **Seattle Community College District:** Vision, leadership, dedicated staff, faculty talent and instructional resources to serve a diverse population of low-income students. The district is known as an innovation leader in the state and the country and while hampered by the reduction in state resources has capitalized on the leveraging of resources to accomplish its vision of meaningful equity for disadvantaged students. That equity is strongly centered in the goal of systemic improvement of completion for SCCD students.

V. NEXT STEPS

As the work of *Pathways to Careers* moves forward to increase targeted program completion, it is clear that this work will require three types of actions: A) Specific reforms within the targeted sector pathways and programs (such as developing stackable credentials), B) Institutional changes within SCCD to assure system-wide pathways reform is coordinated across all campuses and the necessary departments, and C) long-term systemic research-based systemic

reform within SCCD for sustainability of completion improvement. All three types of change will be necessary to achieve the goals of *Pathways to Careers* and to serve as the catalyst for system reform beyond this initiative. Some of suggested next steps related to these three change initiatives are:

A. Next steps to *implement the pathway improvements recommended by sector teams* with a lead from each pathway and overall coordination across the four areas:

- i. Curriculum development in the four pathways according to key design elements prescribed in the project plan including job-linked stackable credentials.
- ii. Identify the mechanism for each program to increase completion including increased capacity, currency or retention.
- iii. Establish targets for declared majors, program enrollments and completions for each pathway
- iv. Expand and develop a process for the application of navigator resources as the first step toward improved wrap-around services to support completion.
- v. Identify specific mechanisms to link pathways to employers, industry associations, and industry networks in each of the sector pathways.
- vi. Establish program evaluation metrics specific to program redesign (e.g. increase in student majors, increased capacity, improved 1st quarter retention and progression, completion rates, and placement data)

B. Steps to *assure institutionalization of Pathways to Careers* within the colleges of SCCD

- i. Appoint a college coordination point to assure communication, identify linkages and assist in consistent adoption strategies
- ii. Develop a common set of benchmarks and metrics to track student from recruitment into programs and onto completion
- iii. Streamline the entry process (admissions, financial aid, assessment prep, assessment and placement, etc.) through a collaborative process involving college student services staff and administration with CBO's
- iv. Formalize a structure and communication system for CBO assistance with student recruitment, enrollment and/or program retention. This process would link CBO and student services staff in collaborative design of the process as well as the development of a tracking communication about student interventions.
- v. Create a student dashboard to track students from entry to employment to support both CBO and college staff.

C. Steps necessary to create *sustainable completion reform* within SCCD

- i. Scale Declare and Prepare (developed at Tacoma CC and a core element in the SCCD Completion by Design Proposal) to require a set of policies and practices for at-risk and first-generation students shown to increase success and completion. These are based on research showing that increased structure enhances completion.
- ii. Engage faculty, staff and administration across the colleges in a data-informed analysis of best practice and best processes in improving outcomes for developmental education. Specifically how might SCCD accelerate progress for students with low academic skills and provide them with basic skills instruction that is contextualized to their area of study or work.
- iii. Develop a 2-year comprehensive plan for improved completion including steps such as streamlined credential awards and targeted policies and interventions applied district-wide.

VI. Conclusion:

Seattle's community-wide approach to educational attainment in the face of economic challenges creates a unique opportunity rarely found in complex urban environments. With support from community partners, we will be able to build on the alliances and strategies that have risen from *Pathways to Careers* to create lasting completion reform.