RESEARCH REPORT

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Washington's Community and Technical Colleges' Student Achievement Initiative:

Lessons Learned since the 2012 Revision and Considerations for New Allocation Model

Introduction

In January 2012, a system-wide task force came together for a nearly year-long process of revising the community and technical college system's performance-based funding (PBF) system, the Student Achievement Initiative. This review was consistent with national experts' recommendations for continuous evaluation of PBF systems to ensure overall goals and principles are being met. Recommendations for adjustments to the achievement metrics and funding model were made to the president's commission (WACTC) in November 2012 and approved by the State Board in December 2012. Recommendations for change reflected a shift in both student success policy and fiscal policy to recognize both the growing national emphasis on the completion agenda, as well as the constrained resource environment caused by the Great Recession.

The goal of this paper is to evaluate whether there appears to be positive movement in student achievement toward the policy goals which were the basis of the 2012 revision of the metrics and funding model. The following sections begin with a brief overview of the theory behind PBF and a background on the revision, followed by a system-level analysis of each of the key milestone areas addressed within the revision. The connection between increased performance and increased funding for colleges is also discussed. The paper concludes with a discussion and implications of an incentive-based allocation system with thoughts on future study.

Background

The Student Achievement Initiative (SAI) is the Washington state community and technical college system's performance-based funding (PBF) system. The overarching goal of PBF is to incentivize a focus on student outcomes versus enrollment inputs by attaching a portion of the state allocation to measures of performance. PBF has roots in resource dependency theory, which postulates that institutions of higher education, whose ability to operate rely heavily on the state



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appropriation, will adapt their behaviors to outcomes that best protect their funding (Harnish, 2011). The strength of a PBF system's ability to change behavior lies heavily within the funding structure. Most PBF systems use a set-aside of the state appropriation, either designated as "new money" which serves as a bonus, or a separate portion of the base funds. A new money system typically does not provide enough incentive for significant behavior change; however, stable and predictable funding is a necessary design feature if the funds are to be a set-aside of the base. To find the right balance of risk and incentive, policy experts recommend gradually increasing the percent of funding dedicated to performance over time as well as building it into the state allocation formula (Harnisch, 2011; Jones, 2012).

As PBF increases in popularity, researchers have studied its effectiveness in changing student outcomes with the goal of offering recommendations for states looking to implement new systems. The results have been mixed. A recent study by Hillman, Tandberg, and Fryer (2015) found that few states have experienced positive gains above states without PBF, and where there were effects, they did not show up for several years. This review included Washington state, and while the authors laud SAI for being one of the most robustly developed PBF 2.0 systems in the country, at the time of the study there had been no significant change in completions. However, the study did not include any elements of the 2012 revision within the context of its analysis.

In SAI's 2012 revision, the focus on completions was raised in response to the growing national spotlight on higher education outcomes through the Completion Agenda (McPhail, 2011). In the funding model, the total amount of performance funding was divided into separate pots with completions accounting for 10 percent of the SAI allocation. This was designed to incentivize a specific focus on completions; however, to meet the policy goals of serving historically underrepresented students, extra incentives were placed on students who begin in basic skills and precollege courses, so as not to create a disincentive for serving students with a long path to completion. Another area of increased focus was the second year, with points added for retention and moving along a specific pathway (45 credits) towards a transfer or professional-technical degree program.

Through these revisions to the metrics and the funding model, SAI stayed true to the underlying policy goal to raise educational attainment for all students while introducing new key focus points to further reinforce the completion agenda. The following questions evaluate outcomes of each key change area from the 2012 revision and the connection to performance funds.

I. Are More Basic Skills Students Transitioning Beyond Basic Skills?

In the revision, a greater incentive was placed on supporting basic skills students beyond the points accumulated through the skills gains tests. Basic skills students earn an extra achievement point for each milestone they achieve beyond basic skills, a marker that stays with them for up to three years after the basic skills coursework.



Figure 1 shows the percent of students with the basic skills marker who have achieved a milestone beyond basic skills in the given year. This percentage is a significant metric of achievement for colleges, and is part of the basic education for adults funding formula. See Appendix A for college-specific data.

The data in Figure 1 show that the percentage of basic skills student who move on to further precollege and college coursework has increased over the past four years. The increase has happened while the number of students enrolled in basic skills coursework has decreased. This enrollment decline is also reflected in a 20 percent decrease in the total basic skills point accumulation over the same time period. This is why total points over time do not provide the full picture of the number of students who make gains and progress beyond basic skills. Enrollment in basic skills could diminish as colleges work to create more efficient pathways and get students into college-level courses more quickly, which is a desired outcome that points alone cannot fully reflect. This consideration will become more important in the coming years in the context of the Workforce Innovation and Opportunity Act (WIOA) federal guidelines¹, and should be considered in the next revision of SAI.



¹WIOA guidelines at the following URL: <u>http://lincs.ed.gov/publications/pdf/CCRStandardsAdultEd.pdf</u>



2. Are precollege students moving more efficiently through the precollege sequence?

Similar to basic skills, enrollment and total point generation in precollege English has decreased substantially over time. This is due, in part, to colleges shortening the sequence to college-level from an average of 2.8 classes to 2.3. This again underscores a fundamental shift in how point totals over time- without the context of enrollment changes- do not fully measure student progression. The more critical metric for understanding change over time is how many students in the precollege sequence complete and move on to college-level. These percentages have stayed relatively flat over time, as shown in Figure 2. The technicalities within the revised metrics required extensive data cleaning in the baseline and learning years, which is reflected in the artificially low percentages of students passing precollege in 2011-12 and 2012-13. More information on those gaps are notated by college in Appendix B.



Precollege math shows a similar enrollment pattern to English, where the average number of precollege courses has decreased from 3.4 in 2011-12 to 3.0 in 2014-15, and the total point accumulation has decreased seven percent. However, the number of students who successfully complete precollege has increased significantly as has the number of students going on to complete their college-level math requirement (Figure 3; Appendix C by college). This represents a positive reflection of colleges' efforts in reforming developmental education to move students more quickly through to college-level. The student outcome gains are encouraging, but this introduces an interesting dilemma about the structure of the point system and how it can continue to serve as an incentive when the goals behind it are being met.





3. Are students being retained into their second year and focusing on a pathway?

As discussed in the background section, two new points were introduced in the 2012 review to put a greater focus on the second year: the retention point and a point for completing 45 credits of coursework in either a professional-technical (workforce) or transfer pathway. Evaluation of student progression in these two areas over the past four years indicates minimal change. The percent of students who were eligible to earn the 45-credit point- and then did so by the end of the academic year- has remained flat since 2011-12. The key difference is there has been a significant shift in the type of 45-credit point, where in 2014-15 more students who earn it are doing so in a transfer pathway. This finding aligns with an observed decrease in workforce students over this time period as the economy recovered and students have gone back to work.

45-credit point	2011-12	2012-13	2013-14	2014-15
Total students who earned point	40,662	40,147	35,113	35,697
% eligible students who earned point	12.0%	12.5%	11.3%	11.7%
% earned point- former basic skills	0.7%	0.7%	0.6%	0.6%
student				
Transfer 45-credit points	42.0%	44.0%	50.0%	52.0%
Workforce 45-credit points	58.0%	56.0%	50.0%	48.0%

Table 1. 45 Credit Point Attainment

To emphasize returning for a second year, the retention point was created to award an extra point for a student enrolled the year prior who earned any achievement point in the current year. As shown in Table 2, the total number of students earning a retention point has decreased since



2011-12. However, because enrollment has also decreased (especially in basic education where a significant number of retention points are awarded), this metric is not quite as compelling as the measure of which point triggered the retention point. Also shown in Table 2 is the percent of students who earned a retention point whose highest achievement in that year was completion. While the enrollment and retention points themselves have dropped, the percent of students receiving a completion as their highest momentum point has gradually increased.

Year	Retention Points	Percent of Retention Points
		Awarded for Completion
2011-12	92,528	31%
2012-13	86,649	32%
2013-14	85,365	33%
2014-15	82,534	34%

Table 2. Retention Point

4. Have completions increased over time? If so, which types of awards have grown for which groups?

Overall, the total number of completions counted within SAI² has not grown significantly over the past four years. However, there has been a shift in the type of completion earned; substantial in some areas. Table 3 describes individual students' highest attainment in the given year; meaning, if there were multiple awards given, only the highest award is counted once. Transfer degrees increased and applied baccalaureate degrees grew exponentially over this time period, although the total numbers are small. Certificates and workforce degrees decreased, which is not surprising given the pattern of 45 credit point accumulation as noted in the above section.

Type of Award	2011-12	2012-13	2013-14	2014-15
Apprenticeship	634	173	264	304
Applied baccalaureate	148	172	219	267
Certificate	7,557	7,361	6,953	6,077
Transfer	14,371	14,429	14,273	15,041
Workforce	9,805	9,105	9,318	9,087
Total	32,515	31,240	31,027	30,776

Table 3. Highest Annual Attainment by Year

² International students are not included in the completion point totals within SAI. The number of these students completing transfer degrees has grown substantially over this time period, but is not reflected here.





Within the 2012 revision, the desire to increase the focus on completions was tempered with concerns about unintentionally creating disincentives for colleges with large populations of historically underserved students. Closing the achievement gap for students of color is a major policy focus for the system and it was important this be aligned with the policy goals within SAI. The metrics and funding model were structured and tested to ensure all mission areas were treated the same, and that no college characteristics (such as high students of color population) significantly predicted performance funding outcomes.

The system regularly disaggregates outcomes by race and ethnicity as ongoing evaluation of the achievement gap. The findings in Table 4 indicate a shift over the past four years in the types of degrees earned by students of color. Bachelor's degree attainment increased substantially for both groups, but more so with students of color. The number of transfer and workforce associate degrees increased for students of color, while the total number of Asian and white student degrees decreased.



	Students of Color*			Asian a			
Year	Bachelor	Transfer	Workforce	Bachelor	Transfer	Workforce	Total
							Degrees
2011-12	24	2,604	1,583	115	11,132	7,761	23,219
2012-13	39	2,709	1,546	129	11,014	7,106	22,543
2013-14	46	2,915	1,677	167	10,641	7,208	22,654
2014-15	56	3,231	1,639	201	11,006	7,075	23,208
4 year change	133%	24%	4%	75%	-1%	-9%	

Table 4. Type of Degree Earned

*African American, Native American, Hispanic, Native Hawaiian or other Pacific Islander, and multi-racial

This is a promising result in that, even though overall degree completions have been flat, they have increased for historically underserved students. A deeper analysis of the number of students who complete as compared to enrollment (Table 5) shows that completion efficiency has also increased over the past five years for all students. Gaps between students of color still exist as compared to white and Asian students, but there is progress being made as students of color increased their completion efficiency at a higher rate. The 32 percent increase in Running Start students who complete explains the vast majority of the increase in completion efficiency for white and Asian students, as the data in Table 4 indicates that total completions for this group has leveled off.

	Completions Per 100 Students 2010-11	Completions Per 100 Students 2014-15	5 Year Change	% Change
African American	6.7	7.8	1.1	16%
Hispanic	9.4	10.7	1.2	13%
Native American	7.1	10.0	2.9	40%
White	11.9	13.2	1.3	11%
Asian	11.7	12.8	1.1	9%
Hawaiian/Pacific Islander	6.4	10.6	4.2	66%
Running Start	9.3	12.4	3.0	32%

Table 5. Completion Efficiency by Race and Ethnicity and Running Start

5. Have the colleges with increased performance had increased performance funds since the baseline year?

For each of the milestone areas of student achievement, there are colleges that showed greater gains over the past four years than others. The college-specific data by milestone is shown in the appendices, and the top performing colleges are summarized in Table 6.



Basic skills transitions	Precollege English	Precollege math	Completions
Bates	South Puget Sound	Seattle colleges	Tacoma
Bellingham	Bellingham	Walla Walla	Clark
Clark	Highline	Spokane Falls	Spokane Falls
Shoreline	Seattle North	Edmonds	Shoreline
Wenatchee Valley	Wenatchee Valley	Everett	Everett

Table 6.	Colleges v	with Larges	t Gains by	Milestone	Area
	Concests	The Larges	t Guins by	mescone	1 11 04

In the context of a zero-sum pool, an important policy question is "how well is performance tied to funding?" In theory, colleges that have increased performance on the metrics over time should see an increase in their performance allocation as well. This link is important in order to generate confidence that the system is doing what it is intended to do; which is to provide an incentive for focusing on student outcomes instead of just enrollments. The funding under the revised system was distributed for the first time to colleges based on the 2013-14 year. To evaluate changes over time, the table in Appendix E shows what the distribution would have been over the past four years, using the new metrics. Based on the information in Table 6 and Appendix E, there is not always a clear connection between increased outcomes and increased funding, for several reasons as identified below.

First, the relationship between increased performance and increased funding is challenging to understand in an environment where the money is distributed based on a share of a static pot. The funding is related in some part to the performance of other colleges, in that if all colleges increase performance equivalently, there is no change in the distributions. This phenomenon of PBF explains why even when there are significant increases in student outcomes, the overall gain in funding might not be large. Wenatchee Valley College is an example of this. As a college it was a top five gainer in more than one metric, but its funding level increased by just four percent.

Second, the integrity of the data can play a role, as in the case of the early years when some of the colleges did not have the coding on their precollege English courses set up correctly. One example is Cascadia, which saw an 11 percent increase in funding in the four-year time period, even though the college was not a standout in any one category. The increase happened between the years where the coding was corrected. Whatcom experienced a similar issue. Centralia College also saw an 11 percent increase in funding from the initial baseline year, due in large part not to increased student outcomes, but to a coding fix on student intent for parent education courses. These data quality problems exemplify the importance of a learning year for a performance-based funding system (which was 2012-13).

Another potential cause for a mismatch between increased outcomes and funding level is when a college experiences a significant change in mission mix, as was the case of Spokane. Spokane Community College showed the greatest raw dollar and percentage growth over the four years, but this occurred in the same time period as their absorption of the Institute for Extended



Learning from Spokane Falls Community College. Spokane Falls experienced a small decline in funding distributions; however, the loss of the basic education mission was offset by their increased student outcomes playing a larger role in their share of the funding. Spokane Falls was one of the top five gainers in two different measures as indicated in Table 6.

Everett Community College was also a top five in the two measures of precollege math to college math transitions and completions (the same as Spokane Falls) and they experienced a 14 percent increase in funding. Both colleges participated in the Achieving the Dream (AtD) initiative (Everett as a leader college), which is designed to improve student outcomes, particularly for students of color. These findings suggest an encouraging alignment between AtD and SAI for improved student success.

Finally, there are also scenarios where colleges make significant gains in student outcomes, but lose money in the aggregate. Clark College, for example, increased in each of the milestones in this report and was a top five gainer in basic skills transitions and completions, but decreased in funding by about 1 percent. This reflects an aspect of the funding model that awards colleges 45 percent of the total allocation on the basis of efficiency, measured by points per student. Larger colleges, such as Clark, are able to generate a larger amount of total points because they have more students, but points per student is size-neutral and there is not significant variation in the award amount between the largest and smallest districts in the system. The system was specifically designed this way to balance the production awards for the large colleges, to insulate the system against drastic enrollment changes, and to provide a fair distribution of awards when the funding pool was pulled from the base allocation. It was not a consideration in the context of a larger percentage of performance funds nor within an allocation model, so will need to be re-evaluated in time.

Discussion and Implications

The Washington state community and technical college system's Student Achievement Initiative is, by definition, a performance-based funding system. The goal is to incentivize a focus on outcomes (versus just enrollments) by attaching a portion of the college's funding to metrics associated with student achievement. Policy research on PBF has encouraged consistent evaluation and revision of these systems to stay aligned with evolving policy goals within a state, and to address unintended consequences that can occur at the design phase. Constant evaluation is also necessary to address the question of what happens when the *intended consequence* is met, and the system begins to lose its ability to serve as an incentive.

This paper evaluated the key milestones areas and funding outcomes that were revised in 2012, and attempted to draw connections between the outcomes and the behavior of the colleges. There is some evidence the established metrics have served their intended purpose. For example, colleges have reduced their precollege course sequence (in some cases) to just one class and in many cases, have set up systems to facilitate students completely by-passing precollege



(accelerated outcomes models). This type of rapid movement through the system is certainly in the best interest of the student as they save money in tuition costs, save time under financial aid limits, and most importantly, time to degree. The most significant predictor of retention and college success is academic preparation, so a student who spends minimal time in precollege has an exponentially growing chance of completing. However, within the current system, does this eventually lead to a disincentive? Colleges are rewarded for share of total point production, and the precollege milestone is worth significant number of points. Will colleges that have fulfilled the intent of the goals behind the metrics eventually find themselves at a disadvantage for moving students into college-level more quickly as their precollege points drop?

The same phenomenon is true for basic skills students. This will interact with the role of precollege as well given the new WIOA guidelines that basic education outcomes must lead directly to college-level. Colleges will soon be in a position to essentially combine basic education with precollege, and subsequently have to choose between either basic skills points and the additional point those students generate as they move through, or the production of precollege points. The outcome and decision should ultimately reflect what is in the best interest for students; however, the natural inclination is for colleges to also think in terms of fiscal stability. Does the benefit of paying 25 dollars for a basic education class for the student outweigh the loss in tuition dollars for the institution? Alternatively, would the potential increase in basic skills and extra points be made up within the SAI allocation?

It is imperative to understand whether or not the incentive theory behind SAI is actually driving behavior, which will become increasingly important as the system moves into a new allocation model beginning in fiscal year 2017. Performance will play a more significant role as the amount of funding will increase substantially in the new model; to five percent of the total allocation (up from less than one percent currently). Not only will the increased role of performance create a shift in behavior, but so will the role of the priority course weighting. Careful attention should be paid to these incentives as they've been built, the kind of behavior it begins to elicit from the colleges, and ways to mitigate unintended consequences. Additionally, the system needs to be forward-thinking about what happens when the goal has been met and if/when the structure of the system starts to become a disincentive. A major strength of the community and technical college system is the level of collaboration and commitment to guiding principles, which were established both for performance funding and for allocation.

A possible follow-up to this paper would be to conduct a qualitative review with colleges to learn their perspective on what has changed for them since SAI was revised, and what types of things they are currently doing to adjust their business practices in preparation for the new allocation model. The results of this analysis will help inform future revisions to SAI as it continues to evolve.



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References

- Harnisch, Thomas. 2011. Performance-based Funding: A re-emerging Strategy in Public Higher Education Financing. American Association of Colleges and Universities. Available http://www.aascu.org/uploadedFiles/AASCU/Content/Root/PolicyAndAdvocacy/Policy Publications/Performance_Funding_AASCU_June2011.pdf. Accessed February 10,2015.
- Hillman, Nicholas., David Tandberg, and Alisa Fryer. 2015. "Evaluating the Impacts of "New"
 Performance Funding in Higher Education." *Educational Evaluation and Policy Analysis*.
 Advance online publication . doi:10.3102/0162373714560224.
- Jones, Dennis. 2012. *Performance Funding: From Idea to Action*. Available http://www.completecollege.org/resources.html. Accessed December 5, 2013.
- McPhail, Christine Johnson. 2011. *The Completion Agenda: A Call to Action*. American Association of Community Colleges. Available http://www.aacc.nche.edu/Publications/ Reports/Pages/default.aspx Accessed December 2, 2013.



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Appendix A. Basic Skills Transition Rates by College

College	2011-12	2012-13	2013-14	2014-15	4 Year
					Change
Bates	24.8%	25.0%	26.3%	34.2%	9.4%
Bellevue	10.7%	13.6%	11.9%	10.9%	0.2%
Bellingham	32.6%	34.8%	34.7%	39.8%	7.2%
Big Bend	21.7%	19.4%	21.5%	19.5%	-2.2%
Cascadia	5.1%	5.6%	5.6%	5.4%	0.3%
Centralia	15.1%	14.2%	13.5%	11.9%	-3.2%
Clark	7.2%	8.1%	11.7%	13.3%	6.0%
Clover Park	10.8%	10.6%	14.3%	13.8%	3.0%
Columbia Basin	4.5%	4.1%	3.3%	2.7%	-1.8%
Edmonds	9.4%	9.0%	9.3%	10.1%	0.7%
Everett	5.2%	6.8%	6.9%	7.4%	2.2%
Grays Harbor	17.8%	17.1%	20.5%	23.0%	5.2%
Green River	14.4%	16.2%	17.0%	14.7%	0.3%
Highline	5.0%	5.5%	4.7%	4.9%	-0.2%
Lake Washington	14.9%	14.3%	10.8%	10.4%	-4.5%
Lower Columbia	17.0%	14.3%	15.5%	17.3%	0.3%
Olympic	14.4%	12.2%	12.4%	10.7%	-3.6%
Peninsula	34.8%	39.9%	41.0%	38.3%	3.5%
Pierce District	12.4%	12.4%	13.0%	15.3%	2.9%
Renton	12.5%	13.7%	12.5%	12.3%	-0.2%
Seattle Central	9.7%	8.9%	10.4%	9.6%	-0.1%
Seattle North	6.6%	6.9%	8.5%	9.8%	3.1%
Seattle South	8.1%	8.4%	9.5%	9.3%	1.2%
Seattle Vocational	27.9%	39.8%	36.1%	24.8%	-3.0%
Institute					
Shoreline	28.1%	29.3%	31.1%	34.2%	6.1%
Skagit Valley	16.7%	13.7%	18.4%	17.8%	1.1%
South Puget Sound	17.6%	16.2%	16.2%	21.8%	4.1%
Spokane	54.6%	56.8%	48.1%	11.3%	-43.3%
Spokane Falls	4.6%	5.4%	7.3%	58.6%	54.0%
Tacoma	20.0%	15.8%	16.7%	19.3%	-0.7%
Walla Walla	13.3%	14.2%	15.2%	13.8%	0.5%
Wenatchee Valley	10.5%	8.4%	10.3%	17.7%	7.2%
Whatcom	13.4%	14.1%	16.8%	14.9%	1.5%
Yakima Valley	13.2%	12.1%	10.8%	8.9%	-4.2%

*The location change of the IEL from Spokane Falls to Spokane is reflected in these percentages



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	Passed Precollege English					Passed College English			
College	2011-12	2012-13	2013-14	2014-15	2011-12	2012-13	2013-14	2014-15	
Bates	58%	59%	49%	49%	10%	13%	18%	24%	
Bellevue	62%	69%	65%	71%	35%	42%	40%	46%	
Bellingham	78%	71%	79%	87%	22%	28%	28%	45%	
Big Bend	72%	70%	73%	77%	39%	32%	34%	38%	
Cascadia	*	*	77%	78%	40%	44%	42%	46%	
Centralia	68%	69%	62%	63%	29%	31%	25%	30%	
Clark	56%	61%	69%	64%	26%	28%	33%	30%	
Clover Park	53%	58%	60%	60%	20%	22%	22%	29%	
Columbia Basin	62%	69%	66%	57%	27%	32%	29%	24%	
Edmonds	*	*	88%	61%	31%	31%	22%	20%	
Everett	58%	57%	66%	61%	25%	30%	33%	28%	
Grays Harbor	59%	52%	56%	50%	29%	23%	25%	24%	
Green River	*	72%	69%	76%	26%	12%	16%	14%	
Highline	33%	59%	65%	67%	33%	37%	41%	44%	
Lake Washington	20%	51%	52%	52%	20%	23%	24%	22%	
Lower Columbia	52%	45%	50%	41%	27%	21%	29%	22%	
Olympic	49%	47%	52%	57%	36%	34%	38%	45%	
Peninsula	76%	73%	67%	67%	34%	28%	21%	24%	
Pierce District	*	*	61%	69%	*	*	31%	28%	
Renton	*	55%	68%	61%	11%	10%	14%	12%	
Seattle Central	74%	73%	74%	76%	41%	46%	46%	49%	
Seattle North	48%	55%	52%	76%	44%	55%	52%	56%	
Seattle South	54%	48%	59%	68%	39%	42%	36%	46%	
Shoreline	*	*	67%	54%	33%	33%	24%	22%	
Skagit Valley	57%	62%	67%	59%	27%	31%	32%	39%	
South Puget Sound	24%	27%	58%	64%	21%	23%	23%	29%	
Spokane	64%	66%	65%	69%	37%	36%	43%	46%	
Spokane Falls	56%	57%	55%	60%	32%	31%	30%	28%	
Tacoma	78%	65%	63%	60%	44%	36%	35%	33%	
Walla Walla	54%	56%	56%	58%	26%	26%	27%	30%	
Wenatchee Valley	42%	46%	47%	52%	19%	22%	25%	31%	
Whatcom	*	*	72%	76%	39%	39%	26%	32%	
Yakima Valley	54%	58%	62%	62%	54%	32%	36%	39%	
Grand Total	45%	52%	63%	63%	30%	31%	32%	33%	

Appendix B. Precollege English Progression and College Completion by College



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	Р	assed Prec	th	Passed college math				
College	2011-12	2012-13	2013-14	2014-15	2011-12	2012-13	2013-14	2014-15
Bates	55%	58%	57%	55%	31%	33%	34%	37%
Bellevue	35%	37%	33%	35%	13%	15%	17%	18%
Bellingham	41%	51%	46%	38%	19%	19%	24%	24%
Big Bend	38%	36%	35%	59%	9%	16%	16%	23%
Cascadia	54%	47%	42%	49%	28%	22%	25%	29%
Centralia	30%	27%	26%	30%	16%	16%	16%	21%
Clark	27%	32%	30%	34%	9%	11%	12%	15%
Clover Park	27%	25%	24%	24%	20%	18%	16%	17%
Columbia Basin	43%	41%	42%	37%	12%	11%	12%	16%
Edmonds	41%	45%	49%	58%	16%	19%	22%	25%
Everett	20%	35%	34%	35%	8%	13%	14%	16%
Grays Harbor	39%	38%	42%	45%	21%	18%	25%	24%
Green River	45%	40%	41%	45%	17%	17%	19%	20%
Highline	54%	55%	58%	57%	21%	23%	24%	22%
Lake Washington	14%	13%	13%	17%	14%	13%	13%	17%
Lower Columbia	30%	27%	33%	33%	14%	13%	14%	15%
Olympic	42%	46%	36%	39%	16%	19%	15%	17%
Peninsula	32%	31%	27%	29%	16%	19%	19%	22%
Pierce District	*	*	36%	55%	*	*	15%	22%
Renton	35%	27%	29%	30%	16%	13%	10%	16%
Seattle Central	34%	33%	35%	45%	10%	11%	13%	19%
Seattle North	32%	31%	35%	41%	10%	10%	14%	18%
Seattle South	35%	48%	51%	53%	14%	17%	19%	25%
Shoreline	36%	34%	40%	33%	12%	16%	19%	17%
Skagit Valley	30%	32%	28%	23%	16%	18%	15%	15%
South Puget Sound	46%	43%	48%	63%	21%	21%	24%	23%
Spokane	25%	30%	35%	38%	8%	10%	10%	13%
Spokane Falls	14%	24%	29%	45%	5%	10%	12%	20%
Tacoma	41%	45%	47%	49%	18%	20%	20%	21%
Walla Walla	31%	32%	37%	44%	12%	12%	14%	19%
Wenatchee Valley	30%	27%	24%	37%	15%	12%	12%	18%
Whatcom	39%	37%	39%	41%	19%	19%	20%	21%
Yakima Valley	31%	34%	33%	40%	12%	13%	16%	18%
Grand Total	34%	36%	37%	41%	14%	15%	16%	19%

Appendix C. Precollege Math Progression and College Completion by College



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College	2011-12	2012-13	2013-14	2014-15	4 Year Total Point Change	4 Year Change in Degree Attainment
Bates	960	784	791	732	-24%	-25%
Bellevue	1,838	1,828	1,823	1,719	-6%	2%
Bellingham	680	602	597	626	-8%	-12%
Big Bend	501	421	413	442	-12%	0%
Cascadia	391	386	364	428	9%	10%
Centralia	552	460	577	527	-5%	3%
Clark	1,717	1,842	1,913	1,853	8%	16%
Clover Park	958	916	962	884	-8%	0%
Columbia Basin	1,263	1,041	1,196	1,187	-6%	2%
Edmonds	1,367	1,262	1,078	992	-27%	-10%
Everett	1,212	1,288	1,292	1,295	7%	11%
Grays Harbor	412	392	359	387	-6%	-3%
Green River	1,764	1,714	1,668	1,405	-20%	-7%
Highline	1,204	1,167	965	1,058	-12%	-8%
Lake Washington	794	714	736	704	-11%	6%
Lower Columbia	812	775	695	675	-17%	2%
Olympic	1,644	1,531	1,735	1,508	-8%	-16%
Peninsula	608	922	760	529	-13%	30%
Pierce District	1,488	1,464	1,532	1,728	16%	13%
Renton	1,013	819	770	865	-15%	18%
Seattle Central	856	807	714	792	-7%	0%
Seattle North	719	642	662	649	-10%	-6%
Seattle South	964	979	936	953	-1%	-22%
Seattle Vocational Institute	323	403	247	179	-45%	*
Shoreline	1,052	1,156	1,107	1,203	14%	22%
Skagit Valley	951	782	823	807	-15%	-17%
South Puget Sound	1,017	998	964	1,001	-2%	-6%
Spokane	1,606	1,355	1,388	1,358	-15%	0%
Spokane Falls	947	952	938	1,072	13%	11%
Tacoma	1,125	1,146	1,235	1,204	7%	16%
Walla Walla	844	803	862	775	-8%	5%
Wenatchee Valley	775	724	719	854	10%	-5%
Whatcom	920	858	852	930	1%	-5%
Yakima Valley	853	930	927	863	1%	5%

Appendix D. Completions by College



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College	2011-12	2012-13	2013-14 2014-15		4 year change	4 year percent change
Bates	132,141	139,463	127,666	119,484	-12,657	-10%
Bellevue	196,192	206,341	203,987	201,971	5,778	3%
Bellingham	110,708	109,919	106,872	106,885	-3,823	-3%
Big Bend	119,919	116,373	116,339	121,028	1,109	1%
Cascadia	101,026	98,434	109,729	112,257	11,231	11%
Centralia	91,249	96,515	91,846	101,367	10,118	11%
Clark	209,023	212,799	207,905	206,890	-2,132	-1%
Clover Park	145,895	140,508	136,792	129,707	-16,188	-11%
Columbia Basin	157,258	153,985	153,939	151,302	-5,956	-4%
Edmonds	165,725	164,999	170,780	157,912	-7,814	-5%
Everett	157,535	167,987	174,460	179,938	22,403	14%
Grays Harbor	107,713	102,555	108,514	108,508	796	1%
Green River	167,380	171,676	174,035	162,982	-4,399	-3%
Highline	173,615	168,709	153,987	158,505	-15,110	-9%
Lake Washington	137,294	141,444	131,728	134,646	-2,648	-2%
Lower Columbia	123,291	117,098	128,127	128,324	5,033	4%
Olympic	168,228	162,716	161,666	160,012	-8,217	-5%
Peninsula	114,164	119,639	119,673	109,935	-4,229	-4%
Pierce District	197,975	202,664	201,877	216,821	18,845	10%
Renton	129,990	127,283	125,550	120,208	-9,782	-8%
Seattle Central	157,108	150,706	147,021	145,896	-11,211	-7%
Seattle North	109,271	103,343	108,828	111,095	1,824	2%
Seattle South	124,661	125,813	125,505	123,668	-993	-1%
Shoreline	126,289	127,336	125,581	124,499	-1,790	-1%
Skagit Valley	137,338	129,974	129,848	125,169	-12,169	-9%
South Puget Sound	137,377	134,019	135,940	151,093	13,716	10%
Spokane	151,508	152,498	151,942	183,120	31,612	21%
Spokane Falls	146,105	150,698	155,085	139,640	-6,465	-4%
Tacoma	183,692	185,371	185,076	179,638	-4,054	-2%
Walla Walla	115,222	108,130	110,757	112,876	-2,346	-2%
Wenatchee Valley	117,352	114,911	115,435	122,116	4,764	4%
Whatcom	126,942	125,176	134,364	130,715	3,773	3%
Yakima Valley	145,441	155,547	153,773	146,423	982	1%
System Total	4,684,627	4,684,627	4,684,627	4,684,627		

Appendix E: Funding Distributions 2009-10 to 2014-15



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