

Washington State's Student Achievement Initiative

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This article describes Washington State's Student Achievement Initiative, an accountability system implemented in 2005-06 that measures students' gains in college readiness, college credits earned, and degree or certificate completion. The goal of the initiative is to increase educational attainment by focusing on the critical momentum points during the student's educational journey and the strategies that promote momentum. The article will describe the foundational research, implementation process, databases associated with the initiative, results from the first performance year, lessons learned, and next steps.

Washington's Community and Technical College System

There are 34 community and technical colleges in Washington State, ranging from small institutions – 2,000 annual full-time equivalency students (FTES) – to large, with over 11,000 annual FTES. The mandated mission of the community college system is to offer thoroughly comprehensive educational, training, and service programs to meet the needs of the communities. The colleges are “open door” by statute.

The colleges serve a wide variety of populations, geographies, and learning needs, including adult literacy for immigrants and K-12 dropouts, dual-credit programs for high school students, academic transfer courses, and workforce training. The student population is largely working class and low income. The median age of students is 26. Thirty-five percent (35%) are students of color, compared to the state population of 24%. Over half of the community and technical college students are working full- or part-time, one-third are parents, and over half attend college part-time.

Oversight for the system is provided by the State Board for Community and Technical Colleges (SBCTC), whose members are appointed by the governor with senate approval. The State Board sets policy and goals for system accountability. In 2006, for example, the State Board adopted a system goal to increase the knowledge and skills of the state's residents by raising educational attainment across the state. The Student Achievement Initiative was created as an approach to reaching this goal.

Student Achievement Initiative

The Student Achievement Initiative replaced an existing accountability system, in place for several years, with four performance measures for the community and technical college system. In addition to measures for the state's higher education system (associate degree production, four-year transfer, and baccalaureate degree attainment), three more were developed by SBCTC to reflect each of three mission areas – academic transfer, workforce development, and basic skills development. Specifically, these measures were:

- Transfer Ready – defined as completing at least 45 credits in core courses with at least a 2.0 GPA;
- Prepared for Work – defined as completing a professional or technical certificate or degree program and achieving industry skill standards; and,
- Basic Skills – defined as gaining at least one competency level on a test after taking an Adult Basic Education or English as a Second Language course.

The transition to a model based on momentum points, or “milestones,” was informed by national experts, literature reviews, and system research to identify models appropriate to the goal of increasing educational attainment in Washington State. For example, the SBCTC conducted data analyses to build a data set that was used in a partnership with the Community College Research Center (CCRC) at Columbia University Teachers College to identify key academic benchmarks that students must meet to successfully complete degrees and certificates. The researchers concluded that for adults who come to community and technical colleges with the least education (a high

school diploma or less), “attending college for at least one year and earning a credential provides a substantial boost in earnings” (Prince & Jenkins, 2005, 3). This threshold came to be referred to as the “tipping point.” This research spurred an interest in shifting some college funding from enrollments to outcomes.

In 2007, the State Board established a Student Achievement Task Force comprised of State Board members and staff, college presidents, faculty, and college trustees. The task force was charged with developing a way to measure and reward colleges for increasing student achievement. The task force received input from a system advisory group that included State Board staff members and a representative group of staff and faculty from across the system.

The task force identified key principles for the initiative that guided the development of measures, advocating for a measurement system that would:

- Improve educational attainment for students;
- Recognize all students in all mission areas and reflect the needs of the diverse communities served by colleges;
- Focus on student outcomes and key momentum points as determined by system data analysis;
- Be simple and understandable;
- Include reliable and valid measures;
- Focus on student achievement that can be influenced by colleges in real timeframes; and,
- Be linked to the demographics of the state’s future population, including improved access and achievement for underserved populations.

The approach heeded lessons learned from other states: focus on areas that colleges can directly control and create a system that is simple and straightforward to understand. Consequently, the measures emphasize both building college readiness and earning college credits in order to help students gain momentum for college success. National experts and the college system viewed the resulting measures as important and meaningful, i.e., the right things are being measured (Prince, et al., 2010).

Achievement Measures

Four categories of achievement measures were identified as a result of the research:

- Building towards college-level skills (basic skills gains, passing pre-college writing or math);
- First-year retention (earning 15 then 30 quarterly college-level credits);
- Completing college-level math (passing math courses required for either technical or academic associate degrees); and,

- Completions (degrees, certificates, apprenticeship training).

These measures focus on short-term, intermediate outcomes that provide meaningful momentum towards degree and certificate completion for all students regardless of where they start. Colleges can track student progress towards these achievement points each quarter, providing immediate feedback and opportunities for intervention strategies.

The achievement points identified are meaningful for all students regardless of demographic characteristics (race, age, income, employment status), academic program or entering skill levels (basic skills, remedial, workforce education, academic transfer), enrollment (part-time or full-time enrollment), and type of institution attended (urban, rural, large, small, community college, technical college). Rigorous data analysis has identified achievement points that, once accomplished, substantially improve students’ chances of completing degrees and certificates. The Community College Research Center conducted analyses for the State Board to assist in identifying momentum points and milestones for different student populations. The analysis was conducted using transcript, demographic, education, and labor market outcome data on a cohort of more than 87,000 first-time community and technical college students who entered the Washington system in the 2001-02 academic year and was tracked over five years. These student groups, milestones, and momentum points serve as the foundation for the achievement point system.

SBCTC researchers performed further analyses, including an analysis of workforce students enrolled in Washington community and technical colleges, suggesting that as students increase their achievement, a higher percentage reach the “tipping point” threshold. The analysis indicated that during the 2007-08 academic year, nearly one-third (31%) of students with substantial achievement and college math ended the year at the tipping point—attending college for at least one year and earning a credential. By comparison, 18% of students who started the year with some prior achievement but no math, and only 2% of those who started with no prior college achievement, reached the tipping point (Washington State Board for Community and Technical Colleges, 2008).

The Funding Model

The Task Force also established principles to guide award funding to colleges. It was decided that colleges would compete against themselves when measuring improvement. In other words, each college receives awards for improvements in student achievement measured by net gains in its total momentum points. Colleges can increase points due to growth in the number of students served

and in productivity. However, if a college's enrollments decrease, point increases are calculated on prorated enrollments so that the college is not penalized. Once awarded, legislative funding is permanently added to the college's base. The funding is awarded for improvements in student success and subsequently becomes a resource for adopting and expanding practices for further success.

The first performance awards were distributed in October 2009, and consisted of funds that became part of each college's base allocation and additional one-time funds from foundations. Subsequent awards will be distributed for *additional* improvements in colleges' momentum points; that is, when total points above the most recent highest year increase or when the rate increases. It is the intention that each college has sufficient funding in its base to build and sustain strategies focused on student success.

Implementation: The Learning Year

The 2007-08 year was designated as a Learning Year to help colleges identify their current level of success using the new measures and to develop strategies to increase student achievement. All colleges received \$52,000 in seed money for student achievement efforts – targeting students eligible for the federal TRIO program – that became part of their base allocation. A variety of conferences, reports, and presentations were designed to inform colleges and other stakeholders about the initiative and to help colleges identify student success strategies that might be funded with the seed money.

Video Conferences

The State Board staff also began organizing video conferences to encourage conversations within and among colleges on how the student achievement data might be integrated into current college efforts to promote student success. The first two video conference series were held in October 2007. The initial series provided an overview of the initiative and the database. During the second video conference series, colleges shared information on how the Student Achievement Initiative was being linked to their strategic plan; institutional effectiveness; student recruitment, retention and success efforts; and "Achieving the Dream" activities. State Board staff also made a presentation at the November meeting of the colleges' institutional researchers. The researchers organized a committee to work with the database. A third series of conferences was held in February 2008 with colleges providing updates on efforts related to student success.

Baseline Data

The State Board provided colleges with their baseline year (2006-07) data and the data dictionary. The database is derived from the system data warehouse; consequently,

the data are refreshed and updated each quarter. A new data dictionary is released when changes are made. The combined baseline data for the colleges were shared widely to help colleges and stakeholders understand how the data could be used to examine student achievement and measure the results of efforts to improve student success.

The database included traditional student characteristics and demographics – age, race/ethnicity, family status, etc. – as well as variables created specifically for the student achievement database that allow colleges to examine student achievement based on such factors as their prior points or participation in special programs.

Informational Reports

In October 2007, the State Board published an introductory monograph, "Meeting Washington State's Needs for an Educated Citizenry and Vital Economy: An Initiative for Measuring Colleges and Awarding Funds for Improving Student Achievement and Success" (Washington State Board for Community and Technical Colleges, 2007). The report provided background about the importance of educational attainment for the state, the rationale for using momentum points to measure improvements from year to year, how points were achieved, and how the points related to student success strategies.

State Board staff also issued a series of reports in 2008 that used the student achievement baseline data to examine achievement for basic skills students (January), transfer students (March), and students preparing for work (December). The Community College Research Center at Teachers College, Columbia University, had been actively engaged in the research on momentum points and also issued several monographs related to the Student Achievement Initiative (Jenkins, 2008; Leinbach & Jenkins, 2008).

Learning Year Evaluation

An evaluation at the completion of the Learning Year (Jenkins, Ellwein, & Boswell, 2008) indicated that, while colleges strongly supported the goals and principles of the Student Achievement Initiative and were linking student achievement to their strategic planning and accreditation activities, awareness of the initiative and meaningful analysis and application of the data were limited. They reported that at many colleges the efforts were limited to student services, developmental education, basic skills, or one-time efforts. Most colleges, they observed, had not yet analyzed their data to plan new strategies to improve student achievement. In addition, the evaluation report suggested that colleges were concerned about unintended effects of the initiative. College presidents emphasized that, in order to be effective, the Student Achievement Initiative "must bring new funding to the colleges, over and above base funding" (p. 6).

College-Level Implementation

SBCTC sends unit record data to each college quarterly showing accrual of achievement points during the year for each student. The data furnish a close to real-time view of the status of students as they start the year and as they gain or fail to gain momentum during the academic year. In addition, the database includes additional indicators to allow researchers greater ease in conducting analyses of their students. An example of a Student Achievement indicator is the summary data element that prioritizes the student's progress by flagging the highest achievement point earned during the year. Other derived fields show students' achievement at the start the quarter so students can be categorized in one of three ways: 1) students with little to no prior achievement (not yet earned 15 college credits), 2) students with some prior achievement (first 15 or 30 credits already earned, but without having completed college math), and 3) students who have

college-level credits earned and have completed college-level math courses.

At the college of one of the authors, Skagit Valley College, discussions among the administrative staff and the college's Board of Trustees led to the integration of achievement points into the college's strategic plan as indicators for the strategic goal "to create and promote educational opportunities for the community, particularly the underserved populations in the district." All the achievement point categories were included as indicators, and progress also takes into account ethnicity and program area. The ability to disaggregate students by their achievement level at the start of the year is also useful in better understanding how the indicators can be used to improve student attainment.

The Student Achievement Initiative has, consequently, emphasized decisions informed by an analysis of relevant data. It should also be noted that conversations at the college level included the observation that, while the milestones measured by the Student Achievement Initiative are crucial to student success, equally important is the issue of educational quality, a factor not part of this accountability system.

Student Achievement Framework for Assessment and Action

The goals of the learning year were to provide colleges with access to their data, guidance and tools for using the data, a means to share practices that appear to increase points, and approaches to creating actionable plans for increasing performance. To widen the conversations about how to use the student achievement data as a means for improving student attainment, State Board staff invited staff from a number of colleges representing student services, instruction, and institutional research to come together to discuss the development of a framework that might guide colleges in identifying and managing relevant data.

After several meetings, the group produced a template for Student Achievement for Assessment and Action, presented in Figure 1. The framework allowed colleges to look at their data for specific groups and point categories, depending on the goals of the institution. Group members were encouraged to engage faculty and staff from across the academic and administrative divisions at their colleges to collaboratively identify how the framework might help to

College Goal/Priorities:

Student Group: Academic Transfer Workforce Adult Basic Education

Student Characteristics:

Categories:	Base Line		Target		1st Year		2nd Year	
	Points	%	Points	%	Points	%	Points	%
Starting with no momentum N=								
No quantitative reasoning N=								
Some momentum N=								
Other N=								

Achievement Points	Increase basic skills	Become college ready	Earn 1 st 15 college credits	Earn 1 st 30 college credits	Earn 5 college credits in math	Complete degrees, certificates, apprenticeships	Total Points
Actions/Strategies/Interventions:	Findings/Results:						
	Use of Results:						

Figure 1. Student Achievement Framework for Assessment and Action

move student achievement conversations forward. Skagit Valley College, for example, used the framework as a way of moving forward a college initiative to integrate counseling and study skills into developmental learning communities.

In Skagit's Counseling-Enhanced Developmental Learning Communities, counselors work with instructors and students in-class on a periodic basis but generally attend the class several times during the first week of the quarter and once or twice a week during the remainder of the term. Specific study skills are covered during the quarter in each learning community; however, when and how these topics are introduced vary among learning communities based on the emerging needs of the students. All students are expected to meet with the counseling faculty outside of class at least once during the quarter to develop educational plans, and are encouraged to meet with teaching faculty to further discuss their educational plans.

The college uses the framework as a means of presenting a visual analysis of the impact of implementing this strategy on transfer and workforce students who need developmental courses. In addition to looking at momentum points earned in math or English from this larger perspective, the college can also match students who took the counseling-enhanced developmental learning communities to the student achievement database in order to compare their achievement points with students who were not enrolled in these courses.

FAST Pivot Tables

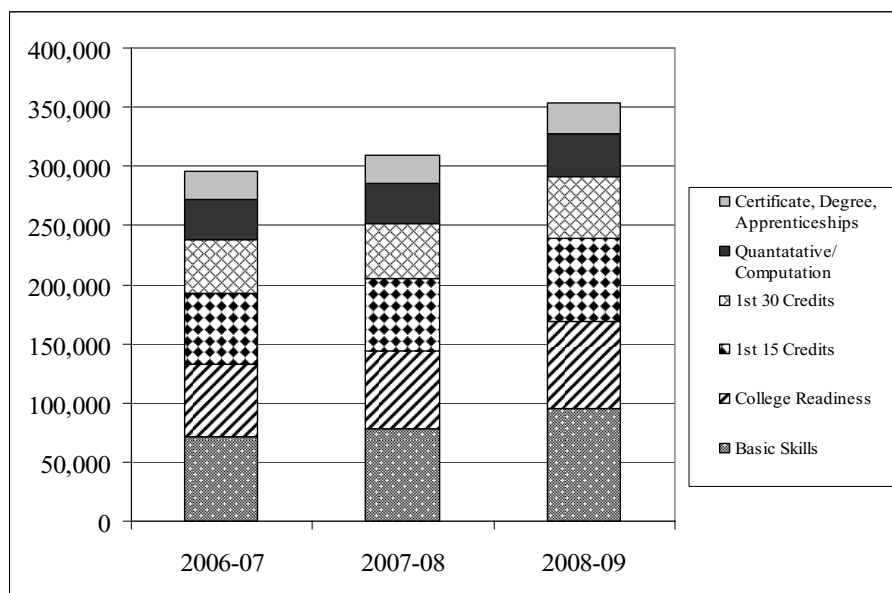
While the framework provided a basis for college conversations and assessment of student success strategies at a particular college, it is not surprising that many presidents and other top-level administrators had a strong interest in seeing how their college compared to others in achieving points. In response to the continuing requests for comparison data, the State Board staff created the Fast Analysis Student Achievement Tables (FAST). The FAST Pivot tables were created in Excel using the student achievement data for all colleges. The software automatically sorts, counts, and totals the data stored in one spreadsheet and creates a second table displaying the summarized data.

The SBCTC has now provided FAST tables for 2006-07, 2007-08, and 2008-09. Each FAST database includes pivot tables with year-end data by year for each college. FAST data can also be disaggregated for student and program characteristics. The FAST databases give colleges the ability to examine student achievement within the college longitudinally by student or achievement categories, or to compare student achievement with other community or technical colleges having similar student demographics or programs.

First Performance Results

Achievement points were measured for three years, and as shown in Figure 2 early results indicate the college system is already making gains in student achievement. Total points increased in both the learning year and in 2008-09 compared to the baseline year. Achievement increased for every momentum category.

Points increase when colleges enroll more students and when they improve practices to advance students further. To illustrate where point gains are derived, Table 1 presents the one-year change in the number of students



¹Achievement Point Definitions

Basic Skills: Students earn a point each time they make a gain as measured by the CASAS tests.

College Readiness: Students earn a point for each pre-college English or mathematics course completed.

First 15 Credits: Students earn a point for completing their first 15 college-level quarter credits.

First 30 Credits: Students earn a point for completing their first 30 college-level quarter credits.

Quantitative/Computation: Students earn a point for completing their first college-level math course required for either a technical or academic associate degree.

Certificate, Degree, Apprenticeships: Students earn a point for completing a degree, certificate, or apprenticeship training.

Figure 2. Washington Community Colleges' Student Achievement Points' by Category for 2006-07, 2007-08 and 2008-09

compared to the one-year change in achievement points by category. The one-year percent change in students enrolled for 2007-08 to 2008-09 was 4 %, while the total point change was 14 % – a greater increase in points than could be attributed to increased enrollments alone. The percent change in completions was five times higher than the proportional change in students. The number of students needing to meet first-year college milestones was unchanged, yet all three momentum categories – completing 15 credits, 30 credits, or a college-level math course – were reached by substantially more students. Point gains are increasing far faster than student enrollments, suggesting that colleges are becoming more efficient at advancing their students.

Table 2 presents the points per student earned by state-funded workforce and transfer students as well as the change in enrollments from 2007-08 to 2008-09 for those two groups. For both workforce and transfer students, the points per student increased, and the percent change in points exceeded the percent change in enrollment by several percentage points.

One million dollars in achievement rewards was provided as part of a \$1 million state allocation and \$800,000 in one-time foundation money. Each college received a flat rate of \$31 for each point over the baseline

year (2006-07). The state proportion of each college's reward is added to their base funding. An additional \$1.8 million is available for 2010-11.

Lessons Learned

While the initiative is in its very early stages of implementation, one of the lessons learned from the development of the Student Achievement Initiative is the importance of grounding measures in data from studies on the students in Washington's community and technical colleges as well as national research and expertise. Equally important has been the inclusion of college faculty, staff, and leadership in establishing guidelines for the initiative.

Although the initial intent was for colleges to compare themselves against their own prior performance, it has become clear that enabling colleges to judge their performance against other colleges with similar institutional and student characteristics is important for college leadership. An additional benefit of such comparisons is the ability to identify colleges that have made significant point gains in a particular category and then share strategies that can lead to improvement in student achievement. As noted above, providing colleges with new funding to build

and sustain strategies focused on student achievement is a critical factor in the success of the initiative.

The last, but certainly not least, lesson learned thus far has been the critical role of communication in creating an understandable and credible accountability system. State Board communication with the colleges has been essential. Equally important, if the initiative is to encourage improvement, is communication within and across the colleges, especially with regard to identifying successful strategies.

The State Board staff is currently providing an introduction to and data from the FAST tool to system commissions and councils. The goals of these presentations are two-fold: (1) to familiarize college leaders with the tool and, (2) more importantly to encourage colleges to share with each other the strategies they believe

Table 1. One Year Change in Washington Community College Student Enrollments, and Achievement Points Earned by Points Category, 2007-08 to 2008-09

Student Category	Percent Change in Students Enrolled	Percent Change in Points Earned
Total	4%	14%
Enrolled in Basic Skills (ABE or ESL)	15%	21%
Enrolled in Pre-College Courses	7%	12%
Started Year with Less Than 15 Credits	3%	15%
Started Year with Less Than 30 Credits	3%	13%
Started Year with No College-Level Math Completed	4%	8%
Students Completing Degrees or Certificates	4%	9%

Table 2. Change in Washington Community College Student Enrollments and Achievement Point Earned by Selected Student Category, 2007-08 to 2008-09

Student Category	2007-08 Points per Student	2008-09 Points per Student	Percent Change in Total Points from 2007-08	Percent Change in Enrollment from 2007-08
Workforce Students	.95	1.03	20%	16%
Transfer Students	1.15	1.17	7%	5%

contributed to their point gains. The hope is that colleges will make changes – based on data – in their instructional and student support practices that increase student attainment. From the college perspective, these are important conversations for learning and sharing the instructional and student service practices that increase points and to ensure that there is a level playing field for colleges.

Next Steps

The Washington Student Achievement Initiative has reached a critical juncture for state policy and college practice. Policy makers have incorporated the measures into state policy, and colleges, having received their first performance dollars, are increasingly interested in the promising practices that their peers have initiated to increase achievement points. With tight state budgets, colleges are concerned how the Student Achievement Initiative might impact their college budgets into the future. In addition, there are growing national implications for the measures as other states adapt and study them for their own systems.

Washington State will evaluate the initiative in 2010 and 2011. There are many critical questions that the state and the colleges want answered and that may influence national policy as well. This has heightened the importance of evaluating the initiative. The Bill and Melinda Gates Foundation has provided funding to the Community College Research Center at Columbia University's Teachers College to evaluate the initiative's impacts in Washington and its implications for other state and national accountability. A sampling of questions to answer includes: What is the impact of the measures and the funding on college practices? What is the relative performance of colleges? How does performance change over time? Which colleges are able to change their performance over time? Why? How?

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