



2013-2014 Student Achievement Report – Highest Cumulative Momentum

BACKGROUND

Purpose of the Student Achievement Initiative (SAI)

In 2006, the State Board for Community and Technical Colleges adopted a System Direction with an overall goal to “raise the knowledge and skills of the state’s residents” by increasing educational attainment across the state.

This goal is a substantial challenge for all of higher education, especially for community and technical colleges. Washington’s community and technical colleges serve a wide spectrum of learning needs from adult literacy for immigrants and K12 drop outs through advanced high school students taking college credit classes. Our colleges serve a predominantly working class and low income student population. The median age of our students is 26, 35 percent are students of color (compared to the state population of 24 percent people of color), over half are working full- or part-time, one third are parents, and over half attend college part-time.

The Student Achievement Initiative is the performance funding system for community and technical colleges. Its purposes are to both improve public accountability by more accurately describing what students achieve from enrolling in our colleges each year, and to provide incentives through financial rewards to colleges for increasing the levels of achievement attained by their students. It represents a shift from funding entirely for enrollment inputs to also funding meaningful outcomes.

Who Is Included in the SAI Database?

- All state-supported, award-seeking, and running start students from SMIS except international and Department of Corrections students.
- Excludes non-state, non-award seeking students.

Achievement Measures

Through a partnership with the Community College Research Center at Columbia University, the college system identified key academic benchmarks that students must meet to successfully complete degrees and certificates. These achievement points are meaningful for all students across demographic characteristics (race, age, income, employment status), academic program or entering skill levels (basic skills, remedial, workforce education, academic transfer), intensity of 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 categories of Achievement measures are:

- Building towards college-level skills (basic skills gains, completing a precollege writing or math sequence)
- First year retention (earning 15 then 30 college level credits)

- Second year retention and becoming workforce or transfer ready (45 college credits)
- Completing college-level math (passing math courses required for either technical or academic associate degrees)
- Completions (degrees, certificates, apprenticeship training)

Reports and Data Tools

The Student Achievement Initiative has served as the guiding framework for tracking and analyzing student progression and success for a multitude of initiatives in the years since its inception. Several reports and data tools have been built to address key policy areas around student success as well as provide opportunities for colleges to benchmark themselves against the system. These reports as well as a brief description of their history and purpose can be found [here](#). At RTC, the SAI database is commonly used to track student progress for program review and grant reports.

HIGHEST CUMULATIVE MOMENTUM

In January of 2015, Darby Kaikkonen and David Prince from the SBCTC presented information at an Instruction Group meeting regarding the Student Achievement Initiative. This presentation outlined the overall framework for assessing Student Achievement in Washington’s community and technical colleges, and specifically addressed RTC students’ achievement data related to momentum points.

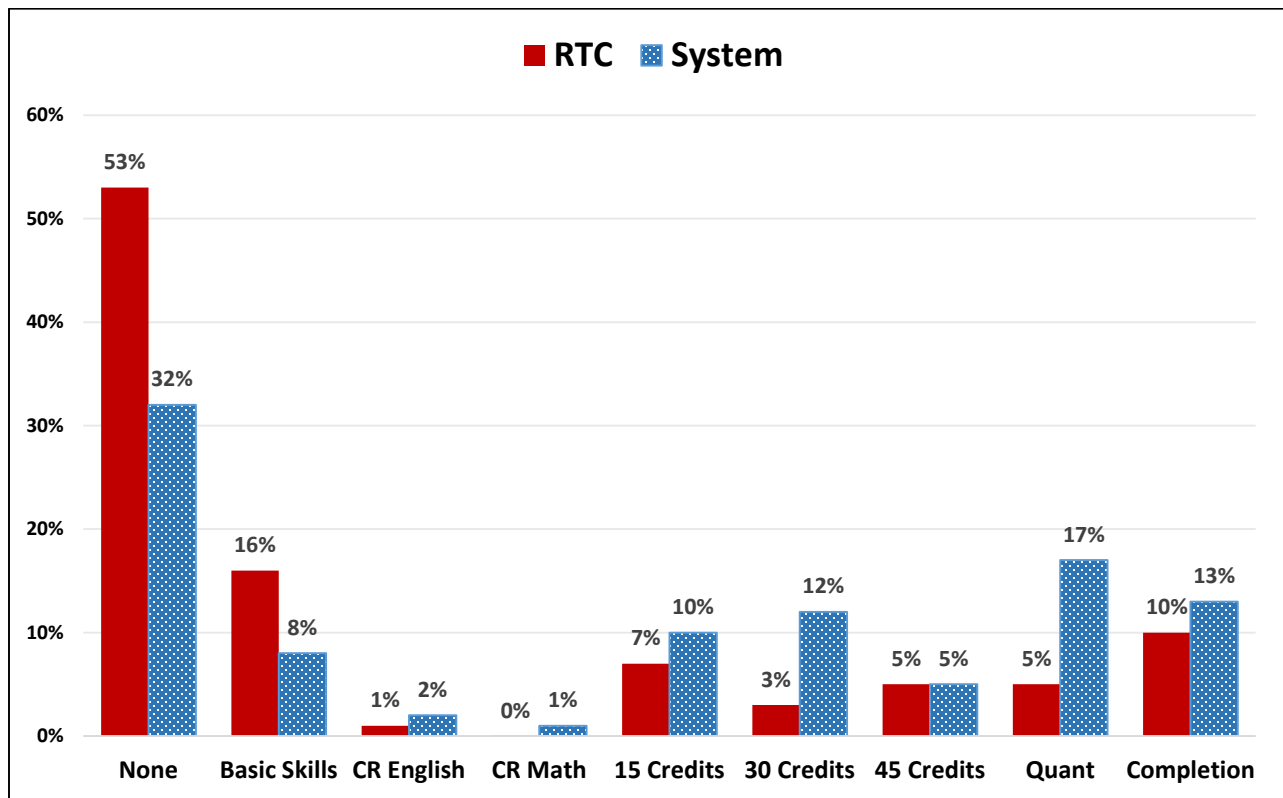
What Is Highest Cumulative Momentum?

Highest cumulative momentum is a way of taking a snapshot of all students in a given year and their furthest point in the momentum continuum. Students will have a highest cumulative momentum score ranging from 0 to 8.

- 0: No momentum gains
- 1: Student earned Basic Skills gains
- 2: Student earned the College Ready English point
- 3: Student earned the College Ready Math point
- 4: Student earned the 15 college-level credits point
- 5: Student earned the 30 college-level credits point
- 6: Student earned the 45 college-level credits point
- 7: Student earned the quantitative course point
- 8: Student earned the completion point

More than half of RTC’s students ended the 2013-2014 year with no momentum, substantially lower than the SBCTC system average. Chart 1 outlines the percentage of students who achieved each of the highest momentum levels, as compared to the SBCTC system average.

Chart 1. Highest Cumulative Momentum for RTC vs. the SBCTC System Average



Who Are the Students with No Momentum Points?

After the presentation from the SBCTC, the IR Office was tasked with assessing who the “non-momentum” students were at RTC. Identifying the students at high risk for not obtaining momentum points, and therefore long-term success, will allow RTC to tailor interventions, grants, and initiatives to support these students.

Students with no cumulative momentum points were compared with students who had at least 1 cumulative momentum point on several key demographic variables. These differences were tested for statistical significance using a series of chi-squared tests. Due to the large sample size of the SAI database (9,000+ records), differences were considered to be statistically significant if they had a significant chi-squared test with a p value $\leq .01$ and a Phi value $\geq .10$. The Phi values are used as a measure of effect size, with values .10-.29 equating to a small effect, values .30-.49 equating to a medium effect, and values .50 or higher equating to a large effect. Statistical significance alone does not indicate whether or not the difference is meaningful. Effect sizes can tell you the magnitude of the statistically significant effect, and can add more context to allow you to interpret the data. Table 1 outlines the statistically significant differences between groups in cumulative momentum attainment and the corresponding effect sizes.

Table 1. Percentage of Students Obtaining 1 or More Momentum Points by Group

Demographic Group		Percent with 1 or more Momentum Points	Effect Size*
Apprenticeship Intent	Yes	7.5%	.30
	No	52.9%	
Continuing Student	Yes	62.9%	.25
	No	37.1%	
Degree-Seeking Intent	Yes	92.0%	.46
	No	35.7%	
Economic Disadvantage	Yes	88.4%	.29
	No	42.3%	
First-Time Student (State System)	Yes	37.0%	.18
	No	55.2%	
Full vs. Part-Time	Full-Time	76.2%	.39
	Part-Time	34.6%	
Gender	Male	35.5%	.29
	Female	65.2%	
I-BEST	Yes	89.9%	.15
	No	46.2%	
Opportunity Grant Recipient	Yes	92.0%	.10
	No	46.9%	
Pell Grant Recipient	Yes	89.3%	.32
	No	41.3%	
Race/Ethnicity (Asian/Hawaiian/Pacific Islander)	Yes	66.2%	.12
	No	51.4%	
Self-Reported Disability	Yes	76.1%	.10
	No	46.5%	
State Need Grant Recipient	Yes	96.7%	.26
	No	44.1%	
Worker Retraining	Yes	84.8%	.14
	No	46.2%	

*Absolute value.

Small Effect .10-.29; Medium Effect .30-.49