Washington State
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INNOVATIVE SCHOOLS IN WASHINGTON: WHAT LESSONS CAN BE LEARNED?

Summary

The 2011 Washington State Legislature passed two laws concerning innovative schools. The first recognized public schools that are "bold, creative, and innovative." A second law sought to expand the number of innovative schools by allowing flexibility in state statutes and rules. At present, there are 34 designated schools and innovation "zones."

For this study, we statistically analyzed school performance; conducted systematic literature reviews; and visited most designated schools. We find:

- The designated innovative schools are extremely varied in their missions, student populations, and strategies.
- Unfortunately, given the small number of schools, we cannot establish a cause-and-effect relationship between the innovations and student achievement.
- We find no evidence that test score outcomes for the designated innovative schools as a group are different from other schools in the state. A few innovative schools have achieved higher than expected outcomes given their student characteristics; others have not.
- Our review of the broader research literature finds that high expectations for student achievement and behavior can positively impact student test scores. Some selected innovations have an evidence-base; others do not.
- During site visits, we met many exceptional principals and teachers deeply committed to creating schools that support and inspire student achievement.

The 2013 Legislature appropriated $20,000 for continued selection and recognition of innovative schools. Setting expectations for student achievement growth in designated schools could help clarify the award's meaning.

The 2011 Washington State Legislature passed two bills concerning innovative schools. The first was designed to recognize public schools that are "bold, creative, and innovative."[1] The second was directed at "start-up" innovative schools and zones, seeking to expand the number by allowing flexibility in state statutes and rules.[2] Neither law resulted in additional funding.

The Washington State Institute for Public Policy (Institute) received a grant from the Bill & Melinda Gates Foundation to study the following questions about the innovative schools:[3]

- How were the designated innovative schools selected, and what are their innovations?
- Do the schools result in improved student achievement?
- Do the designated innovative schools use evidence-based strategies?
- What can be learned from the designated innovative schools' experiences?

Sections 1 through 4 of this report address these questions; Section 5 summarizes the key findings.

Appendices A and B present the innovative schools legislation. Appendix C describes each school or zone in detail. Appendices D and E provide technical details regarding the study's statistical methods.

[1] C202 L11.
[2] C260 L11.
[3] This project was approved by the Institute's Board of Directors: http://www.wsipp.wa.gov/board.asp

SECTION 1: HOW WERE THE DESIGNATED INNOVATIVE SCHOOLS SELECTED AND WHAT ARE THEIR INNOVATIONS?

This section summarizes the selection process for the two categories of innovative schools and describes their innovations.

Existing Innovative Schools

As required by the 2011 legislation, the Office of Superintendent of Public Instruction (OSPI) developed an application procedure, review process, and criteria for the identification of existing innovative schools (we refer to this category of schools as "existing innovative schools"). The application process was open to any public school in the state and publicized on September 19, 2011. To receive the designation, individual schools needed to submit an online application by October 17, 2011, that described their innovative approach.[4]

Forty-three schools submitted an application. A panel of educators reviewed the applications and scored them using a rubric developed by OSPI (see Appendix A).[5]

The 22 highest scoring schools received the innovative designation in November 2011 (see Exhibit 1 for school descriptions). OSPI issued a press release identifying the schools, created a web page with descriptions of the schools, and distributed large banners for display in the school buildings.

Start-up Innovative Schools/Zones

One month after the existing innovative school legislation passed, a second bill concerning new innovative schools and zones was enacted (we call this category of schools "start-up innovative schools/zones").[6] Whereas the previous legislation highlighted existing innovative schools, the new bill focused on expanding the number of innovative schools.

The legislation introduced the concept of an innovative zone, defined as a group of schools that "share common interests, such as geographical location, or that sequentially serve classes of students as they progress through elementary and secondary schools." Zones may include all schools within a district, or a consortium of multiple districts may apply to include all schools within the participating districts.

Under the legislation, schools and zones are designated as start-up innovators for a six-year period beginning in the 2012-13 school year. The designation will be revoked by OSPI if the agency finds that the school/zone is "not increasing progress over time as determined by the multiple measures for evaluation and accountability."[7]

For selection into the start-up category, school districts submitted applications to their Educational Service District (ESD). The legislation allowed each ESD to recommend up to three school/zones for OSPI's approval.[8] Two of the three applications needed to focus on arts, science, technology, engineering or math (A-STEM).

Of the applicants, 11 were for schools or programs and one involved an entire school district. All applications received by the ESDs were recommended to OSPI for approval in January 2012. OSPI approved all the ESDs' recommendations in February 2012 (see Exhibit 2 for descriptions).

Implementation of the new innovations began in the 2012-13 school year. Exhibit 3 summarizes the timeline for selecting existing and start-up innovative schools.

[4] http://www.k12.wa.us/InnovativeSchools/DesignatedSchools.Aspx

[5] The panel included eight members: two principals, a former district superintendent, three educators, a representative from the Washington Education Association, and a member from OSPI.

[6] 2011 c 260 § 1

[7] RCW 28A.630.085

[8] ESDs serving more than 350,000 students could recommend up to 10 applications; at least half were required to be A-STEM focused.

Exhibit 1
22 Existing Innovative Schools Designated in November 2011

School	District	Description of Innovation	Year Began	Enrollment May 2012	FRPM*	Grade Span
10th Street School	Marysville	Teacher-led school; focus on high expectations and personalized learning; music and art integrated into curriculum	1996	176	18.8%	6-8
Aviation High School	Highline	Aviation-themed STEM focus; project-based learning; strong industry connections	2004	427	21.1%	9-12
Bonney Lake High School	Sumner	High Schools That Work model	2005	1,372	27.6%	9-12
Clover Park High	Clover Park	School-wide STEM emphasis; extended hours	2001	1,010	73.6%	9-12
Delta High School	Kennewick, Pasco, Richland	Emphasis on STEM and humanities using project- and problem-based learning	2009	400**	48%**	9-12
Helen B. Stafford Elementary	Tacoma	Arts-infused education; supportive learning environment	2006	466	77.5%	PK-5
Highline Big Picture School	Highline	Individualized learning; internships and interest-based projects	2005	149	65.8%	7-12
Kent Mountain View Academy	Kent	Hosts three programs; multi-age grouping; computer-based credit retrieval; services for students on the autism spectrum	1997	350	37.1%	3-12
Kent Phoenix Academy	Kent	Hosts four programs: transitional support; credit retrieval; service learning; and computer-based curriculum delivery	2007	364	50.8%	9-12
Lincoln Center	Tacoma	School-within-a-school; 540 extra hours of academic time per year; summer school; Saturday events	2008	392**	80%**	9-12
Marysville Arts &Technology High School	Marysville	Small learning community with focus on safe and welcoming community	2003	344	44.5%	9-12
New Horizons High School	Pasco	Support to help at-risk students graduate; incorporates career & technical education courses	2006	198	82.8%	7-12
Sammamish High School	Bellevue	Problem-based curricula; STEM industry mentorships; supports for students with disabilities and English language learners	2008	1,072	41.0%	9-12
Science and Math Institute (SAMi)	Tacoma	Science and math focus; located at Point Defiance Park with zoo, aquarium, beaches, and nature trails	2009	276	45.7%	9-12
Sky Valley Education Center	Monroe	Hosts multiple programs including Parent-Partnership, Montessori, excursion, virtual school, and environmental science	1998	827	9.8%	1-12
Spokane Valley High School	West Valley	Hosts four programs; full-day; contract-based transition school, GED prep; contract-based evening program	2006	94	57.4%	9-12
Summit School	Central Valley	Expeditionary learning model	2004	331	23.9%	K-8
Tacoma School of the Arts (SOTA)	Tacoma	Inquiry-based learning; emphasis on visual/performing arts	2001	486	22.0%	10-12
Talbot Hill Elem.	Renton	MicroSociety model with student-run government, businesses, and services	1993	433	47.1%	K-5
Thornton Creek	Seattle	Expeditionary learning; focus on social-emotional learning	1974	371	10.5%	PK-5
Vancouver School of Arts & Academics	Vancouver	Arts school; integrates academic and creative work	1997	572	21.3%	6-12
Washington Youth Academy	Bremerton	150-bed residential academic intervention/credit recovery program in a quasi-military setting	2009	148***	NA	Ages 16-18

*The percentage of students who qualify for free or reduced priced meals.
**Data provided by the school or district.
***2012 first cohort

Exhibit 2
12 Start-up Innovations Schools/Zones Approved February 2012

ESD	School (District)	Description of Innovation	A-STEM	Enrollment May 2012	FRPM*	Grade Span
ESD 101 Spokane	Riverpoint Academy (Mead)	STEM literacy and project-based learning; partnerships with higher-education institutions	Yes	150**	NA**	11-12
ESD 105 Yakima	Toppenish High School (Toppenish)	Rigorous coursework in engineering, biomedical, and other STEM courses	Yes	709	100%	9-12
ESD 112 Vancouver	River Homelink (Battleground)	Parent-partnership Alternative Learning Experience (ALE) program; emphasis on contract-based and online learning	No	299	20.1%	K-12
	iTech Preparatory (Vancouver)	STEM magnet with focus on project-based learning and ensuring success of students underrepresented in STEM fields	Yes	210**	NA**	6-12
ESD 121 Puget Sound (Renton)	Tacoma Public Schools (All)	District-wide strategies to encourage innovation	Yes	28,529	63.9%	PK-12
	Baker Middle School (Tacoma)	Pursuing National Board for Professional Teaching Standards certification for entire teaching staff	No	606	73.9%	6-8
	First Creek Middle School (Tacoma)	Wraparound academic and social support services	Yes	762	90.3%	6-8
	Foss IB Zone (Tacoma)	Expansion of existing International Baccalaureate (IB) program at Foss High School to Giaudrone Middle & McCarver Elementary	No	2,066	77.0%	PK-12
	Bryant Montessori Zone (Tacoma)	Expansion of Montessori programs at Bryant Elementary and Middle and Geiger Elementary with goal of a PK–12 program	No	691	57.3%	PK-8
	Stewart Middle School (Tacoma)	A-STEM model for school turnaround	Yes	640	79.1%	6-8
	Odyssey (Highline)	Competency-based learning and portfolio assessment with an emphasis on individualized learning	No	85	81.2%	9-12
ESD 123 Pasco	Three Rivers HomeLink (Richland)	Parent-partnership ALE program; online learning emphasis; focus on science and art	Yes	377	16.4%	K-12

*The percentage of students who qualify for free or reduced price meals.
**Data provided by the school or district.
Note: This exhibit was adapted from OSPI's list at http://www.k12.wa.us/InnovativeSchools/pubdocs/NewInnovativeList.pdf

Exhibit 3
Timeline for Washington State's Innovative School Recognition Process, 2011-2013

2011 Legislative Session	October 17, 2011	October-November 2011	November 18, 2011	January 6, 2012	January-February 2012	March 2012	2012-13 School Year
Legislation passed	Application deadline for recognition of existing innovative schools	OSPI, with panel of educators, reviews 43 applications for existing innovative schools	OSPI announces 22 existing innovative schools	Application deadline for start-up innovative schools/ zones	ESDs review & recommend start-ups to OSPI; OSPI approves plans for start-ups	OSPI notifies start-up applicants of application approval	Implementation of approved start-up plans begins

The process for identifying Washington's innovative schools included four characteristics:

- **Schools and districts had to decide that the designation was of value and complete an application within a deadline.** For the first round of designations, there was one month between the notice of the application and the due date. Of the more than 2,200 schools in Washington State,[9] 43 learned about the application process for existing schools and chose to nominate themselves.
- **No specific requirement regarding student achievement was in place for either category of innovative schools.** The existing school designation was intended to recognize schools that encourage "bold, creative and innovative" education ideas and was not dependent on student performance levels. For the start-up schools, the application required that they identify multiple measures for evaluating student achievement with annual reports on progress; no specific criteria were set.
- **Decision-making was by consensus, either a panel of educators, or an ESD.** The existing school panel rated each application and the scores were averaged. In the case of the start-up schools, the ESDs recommended all applicants to OSPI.
- **One school district placed a high value on innovative school status;** Tacoma Public Schools received 18% of the existing school awards and 50% of the startup awards.

These selection factors help clarify what Washington's designated innovative schools do and do not represent. The selected schools include several with very strong reputations for their innovative practices. Many other schools in the state are known for their innovations but did not submit applications, including three schools identified as examples in the existing school legislation.

When the Washington Education Association identified innovative schools in 2011, they used a "broad range of criteria" and listed close to 500 schools in the state.[10] Even with this high number, the organization called the list a "work in progress."

The innovative schools and zones included in this study are thus best understood as a sample of innovative practices in the state. Because this is a non-random sample, we do not know whether the selected schools are representative of the full spectrum of innovations statewide.

[9] http://www.leg.wa.gov/Senate/Committees/WM/Documents/K12%20Guide%202012%20FINAL5.pdf

[10] http://www.washingtonea.org/content/video/11/innovate/schoolslist.pdf

Washington's Designated Innovative Schools' Characteristics

The designated innovative schools include elementary, middle, and high schools located on both the east and west sides of the state (see Exhibit 4).

Appendix C includes detailed descriptions of the individual schools and zones.

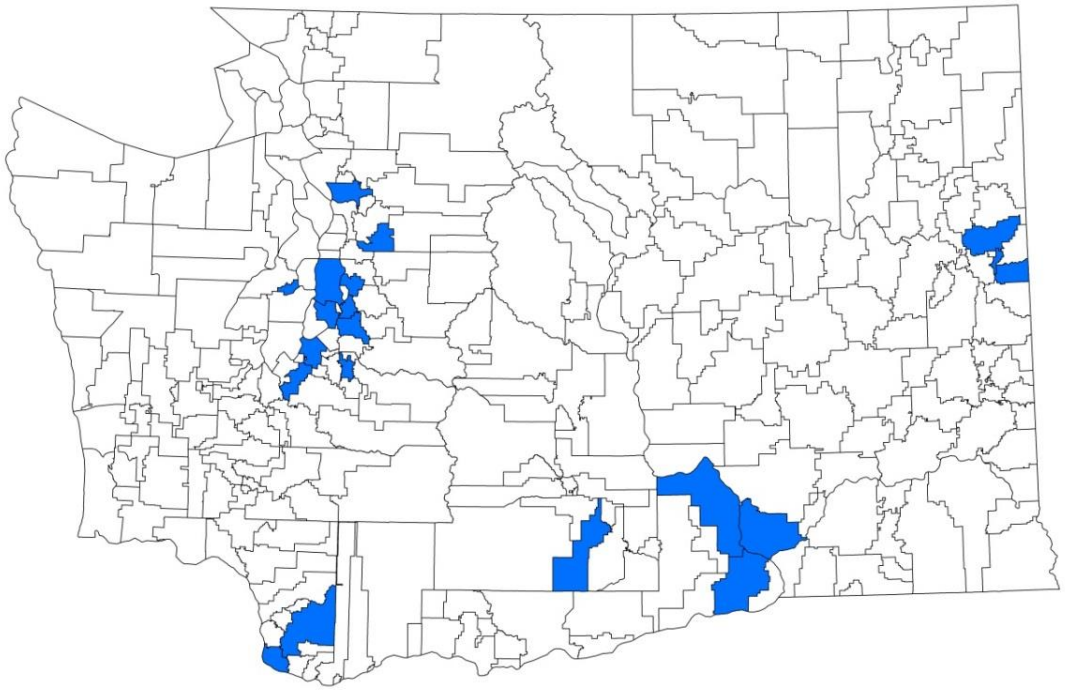
The schools are diverse in their educational missions, models, intended student populations, and self-selected accountability measures. We highlight key characteristics of the school innovations in the narrative below.

Missions. The designated innovative schools have a range of missions, including:

- Increase educational choices for families in the school district;
- Increase college and career opportunities for disadvantaged youth;
- Increase the graduation rate;
- Increase opportunities for students to feel personally connected to the school;
- Engage more students in learning, connecting school lessons with the world beyond the classroom;
- Increase the number of adults serving as mentors and adjunct instructors; and
- Increase students' preparation for and interest in STEM careers.

Several schools adopted more than one of these missions. The motivating forces for the schools' focus came from a variety of sources, including parents, teachers, principals, community members, and industry representatives.

Exhibit 4
Public School Districts in Washington State with Innovative Schools or Zones



School district leaders also played key roles in creating some designated innovative schools. In many cases, the district wanted to appeal to a broader range of families by offering specialized schools. Some of these schools are oriented toward families that would otherwise seek private education options; others attract families who homeschool their children but want to enhance the variety of their child's schooling.

Models. Some innovative schools were inspired by "grass roots" efforts from the staff or community. In other instances, innovative schools selected national models to guide their day-to-day operations, including:

- Big Picture;
- Expeditionary Learning;
- Harlem Children's Zone;
- High Schools That Work;
- International Baccalaureate;
- Knowledge is Power Program (KIPP);
- MicroSociety;
- Montessori;
- National Board for Professional Teaching Standards (NBPTS) Certification for teachers;
- National Guard Youth ChalleNGe; and
- Project Lead the Way.[11]

The selected models vary in their specificity, materials, and requirements for fidelity. For example, Montessori schools may operate differently from each other. The North American Montessori Center offers a rigorous training program for teachers. A school can, however, label itself as a Montessori school and not have staff with Montessori-specific training. On the other end of the spectrum, the International Baccalaureate program name can only be used by schools accredited through their organization.

Most models selected by Washington's innovative schools fall in the middle of this spectrum, where principles and practices are typically associated with a model, but there is extensive discretion regarding what happens on a daily basis in the classroom.

For some models selected by Washington's innovative schools, staff can tap into national resources for professional development. Often, these networks provide advice, curriculum materials, and implementation details.

Section 3 of this report summarizes the research evidence for several models selected by Washington's innovative schools.

Student Populations. Washington's innovative schools are intended for a diverse range of students. Some are neighborhood schools, some are optional-choice within a district, and others draw on students from multiple districts. The categories can be grouped as follows:

- Ten (10) of the designated innovative schools are neighborhood schools where the students live within a set geographic boundary inside the district.
- Twenty (20) are option schools where any student who lives within the district boundary is eligible to enroll. This category includes six alternative schools that focus either on students at risk of dropping out, or students who are primarily home-schooled and whose parents desire additional school supports.
- Two (2) are multi-district schools, where students are drawn from selected districts in the state.

[11] The school summaries in Appendix C include references for these models.

- One (1) school draws from the state as a whole.
- One (1) zone covers a school district.

Four schools rely on lotteries to select among a pool of qualified students. We found two major categories for lotteries, with some variations:

- Selecting among equally qualified students (10th Street School);
- Ensuring that the student body reflects:
  - ✓ The district population by zip code equally (iTech Preparatory);
  - ✓ The demographic characteristics of the school district (SOTA and SAMi); and
  - ✓ Multiple districts equitably (Delta High School).

Aviation High School and Vancouver School of Arts and Academics have the most selective application procedures (in Section 2 we refer to these schools as "highly selective"). These procedures help ensure that applicants are academically qualified for the coursework and have an interest and talent for the school's focus.

For Aviation High, the application requires seven discrete steps, including academic information, essay questions, and teacher recommendations. In the case of Vancouver School of the Arts and Academics, students supply similar information, with the addition of a collaborative workshop and submission of an art form "experience."

Exhibit 5 summarizes the enrollment/ application procedures for each school.

Exhibit 5
Enrollment/Application Process for Designated Innovative Schools

Enrollment Type	Schools
Neighborhood	Baker Middle School Bonney Lake High School Clover Park High School First Creek Middle School Helen B. Stafford Elementary Lincoln Center* Sammamish High School Stewart Middle School Talbot Hill Elementary Toppenish High School
District Option	10th Street Middle School Bryant Montessori Foss IB Zone iTech Preparatory Marysville Arts & Technology High Odyssey River Homelink Summit School Thornton Creek Elementary** Three Rivers Homelink
District Option (Alternative)	Highline Big Picture School Kent Mt. View Academy Kent Phoenix Academy New Horizons High School Sky Valley Education Center Spokane Valley High School
District Option (Selective)	Riverpoint Academy Science and Math Institute Tacoma School of the Arts Vancouver School of Arts and Academics
Multi-District (Selective)	Aviation High School
Multi-District (Representative)	Delta High School
Statewide Option	Washington Youth Academy

**School within a school: students must opt in from Lincoln High School.*
***Thornton Creek is categorized as an alternative school by the state.*

Timing of Innovations. Most existing innovative schools started their innovations in the last ten years. Exhibit 6 divides the existing innovative schools by their duration.

How long does a school's innovation need to be in place before judging its effect on student performance? This metric will vary depending on the nature of the innovation, its "intensity," and other factors.

The legislation for start-up innovative schools has a mechanism to monitor progress for designated schools and, if warranted, revoke the designation. In the law, OSPI is directed to review the annual reports required from each start-up innovative school and zone. If OSPI determines that the school/zone "is not increasing progress over time by determined by the multiple measures for evaluation and accountability provided in the school or zone plan" the superintendent will revoke the designation.

The annual reports from the start-up schools are due to OSPI in fall 2013.[12]

Accountability Measures. As described earlier, the law requires start-up schools to include multiple measures for evaluation and accountability in their applications. Each school selected a unique set of measures, including:

- Graduation rates;
- Statewide assessments of student learning;
- District assessments;
- Enrollment in challenging courses;
- Climate surveys;
- School violence rates;
- School suspension rates;
- Student reflection on learning goals; and
- Community service hours.

Exhibit 6
Duration of Innovative Practices for Existing Innovative Schools

Duration	Schools
Less than 5 years	Delta High School Science and Math Institute Washington Youth Academy
5 to 9 years	Aviation High School Bonney Lake High School Helen B. Stafford Elementary Highline Big Picture School Kent Phoenix Academy Lincoln Center New Horizons High School Sammamish High School Spokane Valley High School Summit School
10 to 20 years	10th Street School Clover Park High School Kent Mountain View Academy Marysville Arts &Technology High Sky Valley Education Center Tacoma School of the Arts Vancouver School of Arts &Academics
20 or more years	Talbot Hill Elementary Thornton Creek

The next section of this report describes our analysis of student academic outcomes in Washington's designated existing innovative schools.

[12] Maria Flores, personal communication, June 2013.

SECTION 2: DO THE DESIGNATED INNOVATIVE SCHOOLS RESULT IN IMPROVED STUDENT ACHIEVEMENT?

Section 1 highlights the missions and models selected by the designated innovative schools. A key question for policymakers is how these particular innovations affect student outcomes. For example, does attending a STEM school or a school focused on wraparound services cause test scores to increase?

Unfortunately, because of the data available for this study, we are not able to answer these cause-and-effect questions. We can, however, describe the students who attend these schools as well as several dimensions of their performance. We can also assess whether the designated innovative schools are "high-performing" given their student characteristics.

As noted, the missions of Washington's designated innovative schools include increasing instructional choices, college and career opportunities, and engagement of at-risk student populations. In this section, we focus on three dimensions of student performance for which state data are available: state assessment results, graduation rates, and enrollment in advanced courses.

Our analysis is limited to the existing innovative schools, as the innovations in the start-up schools and zones are too new to provide meaningful data.

Statistical Limitations

Evaluating student outcomes in the designated innovative schools is complicated by several factors. As described earlier, the schools differ in important ways—grade level, admission policies, student characteristics, and prior student achievement. Additionally, existing innovative schools adopted different types of innovations (e.g., project-based learning, Montessori). Several are schools of choice, where students apply or opt in.

To isolate the effect of an innovation, we need to control for other factors that influence student outcomes—characteristics of the schools, teachers, students and parents. Unfortunately, many of these factors are unobserved in the data available (e.g., student ability and motivation, teacher quality, parental involvement).

For example, suppose we observe relatively high test scores in an innovative school. These high scores could be due to the innovation or to other factors, such as a few exceptional teachers or a highly selective admissions process resulting in a student body with above-average motivation.

Ideally, we would control for these unobserved characteristics by randomly assigning an innovation to some schools and not others, and observing the change in outcomes across schools. This design would effectively control for observed and unobserved differences. Unfortunately, random assignment was not possible for this study.

An additional issue is the relatively small number of designated innovative schools. Randomization controls for unobserved characteristics, but only if there are enough schools in the study. The ability to estimate a true effect of an innovation is largely determined by the number of schools in the study. We simply have too few schools in the analysis, and their innovations are different.[13]

While we cannot isolate the impact of particular innovations, we can gauge the extent to which a school is high-performing given their student characteristics.

[13] We estimate that a study would need to include about 40 schools with a particular innovation and another 40 without that innovation to result in statistically valid conclusions. See Appendix D for details.

Data Sources

We use three data sources to describe student outcomes:

- Washington State Report Card (OSPI);
- Washington State Board of Education (SBE) Achievement Index; and
- Longitudinal student-level K–12 data provided by the Education Research and Data Center (ERDC) at the Office of Financial Management.

Information from these sources is summarized for each school in Appendix C, including descriptions of:

- Student demographics;
- Participation in special programs (e.g., free or reduced-price meals, special education);
- State assessment score trends;
- Graduation and drop-out rates;
- Grade repetition;
- Attendance;
- SBE achievement indicators; and
- Our value-added school effect estimates for math and reading assessments (explained below and described in detail in Appendix D).

School Value-Added Models

Using the student-level data, we develop value-added models that control for prior student achievement and other factors to measure a school's contribution to learning.[14] This method allows us to measure progress in student learning based on the Washington State math and reading assessments. The SBE and OSPI adopted new value-added measures (based on student growth percentiles) that will be reported for schools in the future.[15]

Before reporting the results, three caveats are important to guide interpretation:

- Value-added models are unlikely to fully address student self-selection into schools. We can, however, infer the likely direction of the error in the estimates. In schools that attract highly capable, motivated students (e.g., STEM schools) the models are likely to *over-estimate* school effects. Among schools that attract students with substantial (unmeasured) barriers to achievement (e.g., alternative schools serving at-risk students) the models are likely to *under-estimate* school effects.
- A school's performance on assessments can vary substantially from year to year. We attempt to address this issue by pooling data across years.
- The available student-level data are rich but not complete. For example, we have no information on parent characteristics.

Innovative Versus Other Schools. A central question of this study is whether the designated innovative schools increase student achievement more than traditional public schools in Washington State.

To test this question, we estimate value-added models for the existing innovative schools as a group to test whether they perform differently.

[14] For further discussion of value-added models, see: Todd, P. and Wolpin, K. (2007). The Production of Cognitive Achievement in Children: Home, School, and Racial Test Score Gaps. *Journal of Human Capital*, 1(1): 91-136; see also Hanushek, E. (2008). Education Production Functions. In Steven N. Durlauf and Lawrence E. Blume (eds.), The New Palgrave Dictionary of Economics, Basingstoke: Palgrave Macmillan

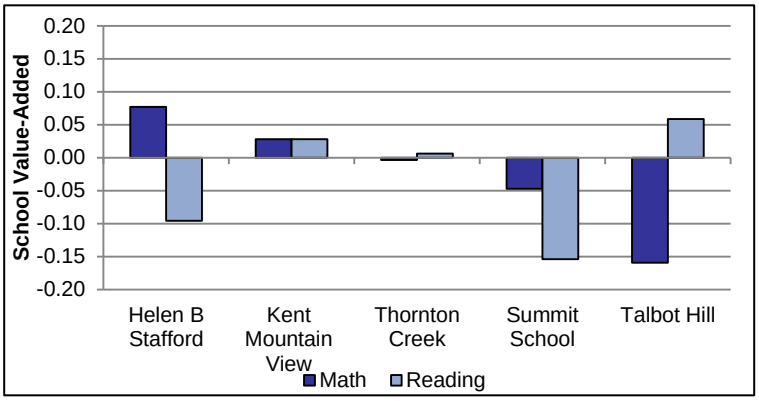
[15] https://eds.ospi.k12.wa.us/WAI

We find no evidence that the innovative schools *as a group* have above-average student performance as measured by reading and math test scores.

Individual School Results. The performance of *individual* designated innovative schools varies substantially. Exhibits 7 through 11 present the value-added effects for designated innovative schools.

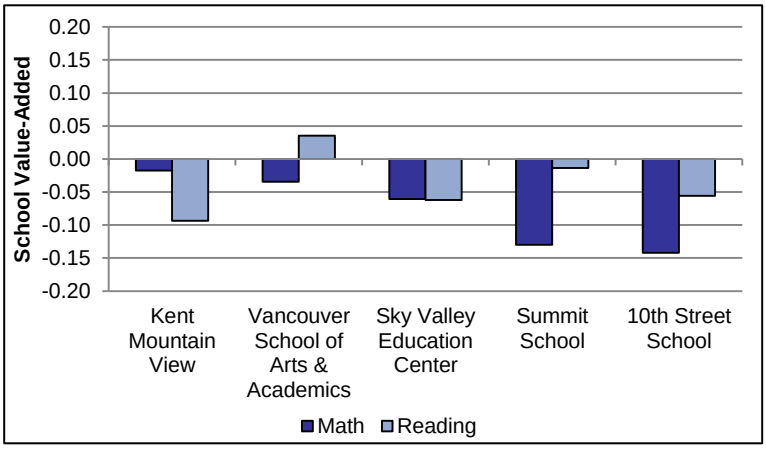
Estimates are "mean-centered"—that is, the average school has a value of zero. Estimates above zero indicate higher than average performance after controlling for student characteristics and prior test scores.[16]

Exhibit 7
School Value-added Effects: Elementary Grades



WSIPP, 2013
Estimates above zero indicate higher than average performance (controlling for student characteristics and prior test scores); estimates below zero indicate lower than average performance.

Exhibit 8
School Value-added Effects: Middle School Grades



WSIPP, 2013
Estimates above zero indicate higher than average performance (controlling for student characteristics and prior test scores); estimates below zero indicate lower than average performance.

[16] Confidence intervals for these estimates are provided in the school summaries and technical appendix.

Elementary Grades. Kent Mountain View has above average effects in both subjects (Exhibit 7). Talbot Hill's reading effect is above average. Helen B. Stafford, which serves a largely minority and low-income student population, achieved higher than average results in math. (The school's below average reading effect is influenced by lower performance in one of the years).

Middle School Grades. Among the five innovative schools serving middle school students, value-added effects are generally below average (Exhibit 8). The one exception is Vancouver School of Arts and Academics' reading result.

High Schools. Exhibits 9 through 11 display math and reading value-added school effects for designated innovative high schools. We present math effects for the 10th grade WASL/HSPE and the End-of-course exam in algebra (EOC 1).[17] Results for the EOC 2 (geometry) are also presented in Appendix C. We group the high schools into three categories: highly selective, neighborhood or district option, and alternative schools.

The Vancouver School of Arts and Academics and Aviation High are very selective high schools that attract highly capable students. These schools have large positive estimated effects in math, and the Vancouver school is among the highest performers in Washington State for reading.

There is potential, given the self-selection of highly motivated students into these schools, for these effects to be over-stated. Still, after controlling for an array of measured student characteristics and prior test scores, performance is above average. Aviation's lower value-added estimate for reading could well be due to what is called a "ceiling-effect." That is, reading scores are already extremely high among incoming Aviation students; there is little room for moving up the test score distribution.

Among the neighborhood and district option schools, Sammamish has consistently large positive effects in math and reading. Performance is mixed for the other high schools. Bonney Lake and Clover Park perform above average on some math assessments but not others. The Lincoln Center performs above average on both the EOC 1 and EOC 2 math assessments.[18] The Tacoma School of the Arts has large positive effects in reading. The Science and Math Institute, established in 2009, has only one year of student-level assessment data.

Student characteristics vary across alternative schools, with some serving more at-risk youth. Our value-added models do not fully account for the barriers faced by students of some alternative schools; the reported value-added effects may underestimate the school's contribution.

For example, a third of the students at New Horizons are teen parents; roughly a fifth have been enrolled in a juvenile detention center; many have dropped out of school in the past; and most have repeated at least one grade in high school. For these reasons, estimates for New Horizons are not presented.

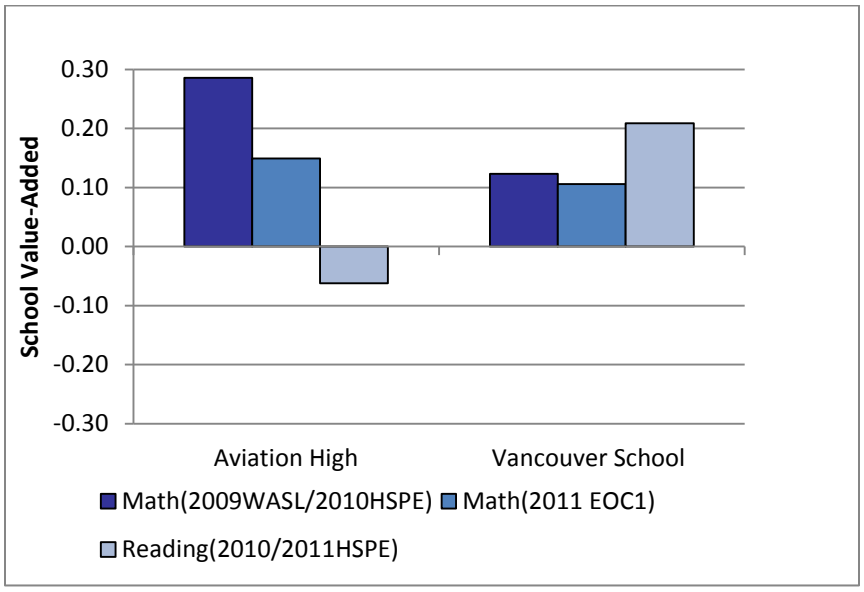
Results for the designated innovative alternative schools are mixed. Highline Big Picture, Spokane Valley, and Kent Phoenix have above average effects in reading but not in math. The Sky Valley Education Center, a parent-partnership school, has above average estimated effects in both reading and math.[19]

[17] WASL = Washington Assessment of Student Learning; HSPE = High School Proficiency Exam.

[18] Insufficient data precluded estimating WASL/HSPE math results for the Lincoln Center. The EOC Math 2 estimates for Lincoln Center are provided in the school summaries (Appendix C).

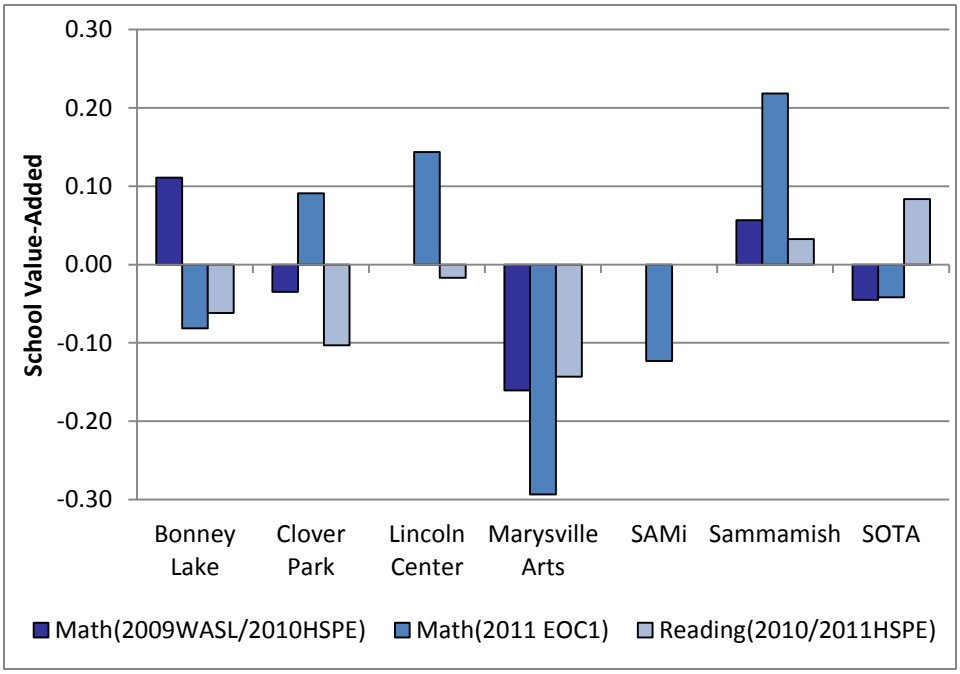
[19] Estimates include students who comply with testing. Compliance among Sky Valley students is especially low in the elementary grades and higher among high school students.

Exhibit 9
School Value-added Effects: Highly Selective High Schools



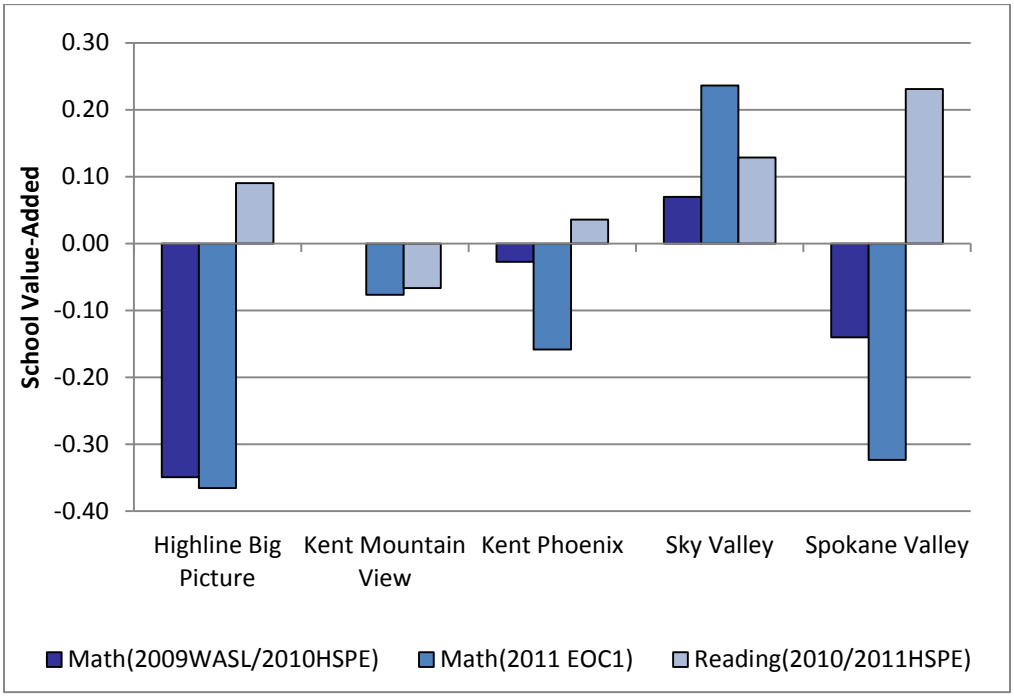
WSIPP, 2013
Estimates above zero indicate higher than average performance (controlling for student characteristics and prior test scores); estimates below zero indicate lower than average performance.

Exhibit 10
School Value-added Effects: Neighborhood or District Option High Schools



WSIPP, 2013
Estimates above zero indicate higher than average performance (controlling for student characteristics and prior test scores); estimates below zero indicate lower than average performance.
Note: Only one year of assessment data are available for the Science and Math Institute; our reported reading effect estimates are based on two years of data.

Exhibit 11
School Value-added Effects: Alternative High Schools



WSIPP, 2013
Estimates above zero indicate higher than average performance (controlling for student characteristics and prior test scores); estimates below zero indicate lower than average performance.

Graduation Rates

Our primary focus in this report is an analysis of student test scores, presented above. Whether students graduate from high school is another key outcome for the K–12 public school system. OSPI reported graduation rates and the SBE's assessment of these rates are presented in detail in the school summaries in Appendix C.[20] Results for innovative schools include the following:

- As expected, graduation rates are high at the Vancouver School of Arts and Academics and Aviation High School, which both have highly selective admissions processes.
- Graduation rates are also high at the Lincoln Center, Tacoma School of the Arts, Bonney Lake, and Sammamish high schools.
- Rates for most of Washington's designated innovative alternative schools are below the state average, although rates for four of the six schools are higher than the average for all alternative schools in the state. Among the alternative schools, Spokane Valley has achieved very high graduation rates (92%).
- Graduation rates at Kent Phoenix and New Horizons are below the alternative school average.[21]

[20] The State Board of Education produces an "achievement vs. peers" graduation rate, which ranks schools' extended graduation rate performance controlling for student characteristics.

[21] As noted above, New Horizons serves an especially at-risk population.

- Some schools have graduation rates that, although low, are higher than expected given their student demographics. The SBE ranked Clover Park's graduation performance as "exemplary" during the 2010-11 and 2011-12 school years, after controlling for student characteristics.[22]

Advanced Course Enrollments

The school summaries in Appendix C present information on advanced placement (AP) course enrollments for several innovative schools. Lower AP enrollment among low-income students is an important dimension of the educational opportunity gap. On a statewide basis, approximately 22% of juniors and seniors take at least one AP course, while among low-income students, the rate is about 13%.[23]

At Sammamish High School, AP enrollment is above average, with 58% of juniors and 65% of seniors participating. Moreover, rates for low-income students in the school are also relatively high: 40% of juniors and 50% of seniors enroll in AP.

Aviation High students enroll in an impressive array of advanced math, science, and aviation-related courses. Enrollment in AP courses among juniors and seniors at the Vancouver School of the Arts and Academics is about 75%.

Bonney Lake High School also has higher than average AP enrollment rates among all students. Relatively high percentages of students take three or more advanced placement courses in a given year.

The next section of this report describes our research review of the innovations selected by the designated innovative schools.

[22] Clover Park serves a largely minority student population and has high free or reduced-price meal participation.

[23] Low-income is defined here as ever participating in the free or reduced-price meal program.

SECTION 3: DO THE DESIGNATED INNOVATIVE SCHOOLS USE EVIDENCE-BASED STRATEGIES?

Section 1 describes the variety of models used by Washington's designated innovative schools. A key question for policymakers is whether these approaches positively impact student learning.

To complement the statistical analysis in Section 2, we conducted a systematic review of available research evidence from throughout the United States and elsewhere. We assess the weight of the evidence regarding whether the innovations implemented by Washington's designated schools are likely to be effective in improving student outcomes.

This section summarizes our research review and addresses the following questions:

- Have the designated schools implemented evidence-based innovations?
- What can the research on the selected innovations tell us about the most effective ways to improve student learning outcomes?

Research Approach. We identify topics for review using four factors: the schools' identification of their key strategies; the approaches mentioned in the innovative school legislation; consultation with the study advisory group; and the availability of high-quality evaluation studies.

The selection process results in 13 topics with sufficient studies to draw conclusions about effectiveness.[24] As mentioned earlier, many schools rely on a combination of models, and the research base does not allow us to estimate impacts from multiple, simultaneous interventions.

We use statistical procedures called "meta-analysis" to estimate the effects of each innovation on student outcomes. In meta-analysis, we pool the results of all credible evaluation studies on each topic and compute weighted averages. The weighted averages—"effect sizes"—represent typical student outcomes for schools selecting each strategy, based on the weight of the evidence.

We focus on academic outcomes—test scores and high school graduation rates. The goals of K–12 schools are broader, including social and emotional learning, college attendance, civic engagement, labor market success, and student, parent, and teacher satisfaction, among many others. We are unable to meta-analyze these outcomes because they are measured infrequently or in varied, non-standardized ways.

Meta-Analytic Findings. Exhibit 12 summarizes our findings, organized by their impact on student outcomes and in alphabetical order. We present what can be termed the "average effect"—that is, the most likely results of the school models evaluated in the national research literature. In practice, effectiveness may vary, depending on fidelity of implementation and other factors.

Appendix E describes our methods and findings in detail.

[24] We reviewed an additional 15 topics and found there were either too few rigorous evaluations to meta-analyze or that the size and complexity of the research literature would not allow us to fully review the topics for this report (see Appendix E for more detail).

Exhibit 12
Summary of WSIPP Meta-Analytic Results: Average Impacts on Student Outcomes

Topic	WSIPP Meta-Analytic Result
(a) On average, these strategies produce consistent positive impacts on student academic outcomes	
National Board for Professional Teaching Standards (NBPTS) certification	Students who have teachers with NBPTS certification have slightly higher than average test scores. The available evidence is inconclusive whether the certification recognizes already effective teachers or improves teaching practices.
Parent involvement in reading instruction	Elementary school-based programs that encourage parent involvement in reading instruction improve student reading outcomes.
Principals (school leadership)	School leadership affects student outcomes: a principal who is one standard deviation above typical principal effectiveness can improve student test scores.
School-wide positive behavior programs	School-wide interventions focused on encouraging positive behavior can improve math and reading test scores.
Teacher content-specific professional development	Content-specific professional development is associated with improved student test scores.
Teacher induction/mentoring	For teacher induction and mentoring programs, the results are mixed, but the average impact is positive.
Tutoring	One-on-one tutoring can be an effective way to improve reading test scores.
(b) On average, these strategies produce inconsistent impacts on student academic outcomes	
Charter schools	Nationally, charter schools do not have a consistent impact on student test scores (some have positive impacts, some negative). Our analysis was unable to identify specific practices of charter schools associated with more positive outcomes. However, KIPP charter schools and charter schools located in urban areas have consistently positive impacts on student test score outcomes.
Expeditionary learning	Expeditionary learning does not have a consistent impact on student test scores (some programs have positive impacts, some negative).
Instructional time (one additional day)	One additional school day does not have a consistent impact on student test scores (some negative and some positive impacts; the effects may depend on how the time is used).
National Guard Youth ChalleNGe Program	ChalleNGe appears to have a positive impact on high school graduation rates and mixed impacts on other outcomes.
Project Lead the Way	Project Lead the Way improves student math scores but does not consistently impact reading or science test scores.
Teacher general professional development	Providing more professional development in general is not associated with improved student test scores.
(c) Insufficient research base to draw conclusions	
• Advancement Via Individual Determination (AVID) • Blended learning • High Schools that Work • International Baccalaureate (IB)	• MicroSociety • Montessori • Professional learning communities

From the topics we were able to meta-analyze, a few results are noteworthy.

- **Innovation alone does not guarantee results.** The mixed results for charter schools (some have positive impacts, some negative) are qualitatively similar to the variation in our value-added findings for the designated innovative schools.
- **Principals and teachers matter.** Several findings highlight the central role of school personnel. Above-average principals positively impact student achievement. Similarly, teacher training and support, including NBPTS certification, content-specific professional development, and induction/mentoring, are associated with improved student test score outcomes.
- **For many of the topics we meta-analyzed, effectiveness varies.** Several curricular approaches, such as Project Lead the Way and expeditionary learning, have varying results. Similarly, an additional day of instructional time showed mixed results that may depend on how the extra day is used.
- **Programs that encourage pro-social behavior for all students can improve student test score outcomes.** School-wide positive behavior programs have substantial positive impacts on student reading and math scores, on average. These programs typically include a specialized curriculum; professional development for teachers and staff; and encouragement of and rewards for positive behaviors such as being on time and listening in the classroom.
- **The "high expectations" model for student behavior and performance is promising and warrants further examination.** Charter schools operated by the national network of Knowledge is Power Program (KIPP) schools have consistently positive impacts on student test scores, particularly in math.[25] KIPP schools, which predominantly enroll minority and low-income students in free, open-enrollment public schools, aim to "reinforce a culture of achievement and support" through "clearly defined and measurable high expectations for academic achievement and conduct."[26]

  This finding aligns with other research on effective schools. The OSPI has identified "high expectations and standards for all students" as one of nine characteristics of high performing schools.[27]

The next section summarizes our observations from the site visits.

[25] Our analysis of KIPP is a subset of our charter analysis. See Appendix E for more detailed results.
[26] www.kipp.org/our-approach/five-pillars
[27] Shannon, G.S. & Bylsma, P. (2007). *The Nine Characteristics of High-Performing Schools: A research-based resource for schools and districts to assist with improving student learning. (2nd Ed.).* Olympia, WA: OSPI.

SECTION 4: WHAT CAN BE LEARNED FROM THE DESIGNATED INNOVATIVE SCHOOLS' EXPERIENCES?

In 2012 and 2013, we conducted site visits to existing and start-up innovative schools.[28] We visited 25 schools, as well the one district-wide zone (Tacoma Public Schools). During a typical two- to three-hour visit, we met with the principal and key staff, toured the building, and spoke with teachers and students.

Our discussions centered on two questions:

1) What is the innovation?

2) What was required for the innovation to be implemented?

As mentioned earlier, Appendix C contains descriptions of each school, incorporating observations for those schools we visited.[29] Given the relatively short time at each school, these observations are not case studies. Rather, we sought to understand the innovation's key features as well as the challenges and opportunities facing school leaders who are interested in innovation.

We organize our observations as follows:

- Purposes of innovations;
- School personnel;
- District support;
- Community partnerships and support;
- Parental support and involvement; and
- Challenges.

[28] The site visit team included one or two WSIPP staff and a member of the study's Advisory Group, Art Jarvis. Dr. Jarvis recently retired as Superintendent of Tacoma Public Schools after a lengthy career in public education Dr. Jarvis's experience with Tacoma's innovative schools and his understanding of public education added depth and nuance to the study team's conversations with school leaders. Jana Carlisle also attended the site visit to Lincoln High School.

[29] Draft versions of school summaries were sent to each school's principal and he/she was invited to suggest changes and additions.

Purposes of Innovations

Site visit observation: Innovative schools and programs increase educational options for students and families.

Washington's innovative schools offer non-traditional options for students and families, incorporating a variety of educational models, curriculum choices, and instructional techniques. Their degree of distinction from traditional schools varies significantly; some schools are immediately identifiable as outside the norm, while others require careful attention to discern their innovation.

Of the designated schools, the majority are either high schools or multi-age schools that include high school and many are schools offering an alternative learning experience.

Educators have experimented with high school structures for many years in an effort to increase graduation rates as well as engage students' curiosity and motivation. In the designated innovative high schools, the innovations generally aim to personalize learning for students and provide a greater relevance to the world beyond the classroom. In Washington, elementary innovation efforts tend to be focused on program options such as Montessori, MicroSociety, International Baccalaureate, and arts.

Some of the designated innovative schools offer alternative learning experiences (ALE). ALEs have a long history in Washington and incorporate a wide range of school types, including those for at-risk students. ALE schools allow students to enroll in public education without meeting the in-class, seat-time requirements for regular instruction. ALEs also provide a way for school districts to claim students enrolled in nontraditional programs for purposes of state funding.

As noted earlier, the Tacoma School District has more designated innovative schools than any other district. The Tacoma School Board intends to "push innovation even more in hopes that more students can match up with custom schools and programs that ignite their passion for learning and help them succeed academically." The board's innovation policy encourages the district to adopt new "specialty schools and programs that support academic achievement."[30]

School Personnel

Site visit observation: Innovative schools require exceptional principals.

Our site visits and research review confirmed what most people know through experience: principals have a significant effect on student achievement. During our visits, we met several exceptional school leaders. These individuals are driven to perform at high levels and inspire their staff. Frequently, the principals have an extensive past as educators and enjoy high credibility both in the district and in their school.

We found many principals who invest their "heart and soul" in their school and work very long hours. Following each success, they set a higher bar for themselves. Most of these principals also exhibit an intensity and urgency communicated in every interaction; they want progress as quickly as possible.

In many instances, the principals perform the typical expectations for this position, with the added responsibility of managing partnerships with community organizations and businesses. These partnerships extend the schools' capacity through an increased number of adults providing direction, support, and academic enrichment for students. Managing the involvement of these individuals and organizations, however, requires continued attention and focus.

Depending on the type of innovative school, demands on the principal vary. For example, schools concentrating on increasing educational opportunities for low-income students tackle a different portfolio of issues than leaders in STEM or arts schools.

Student behavioral issues, in particular, are a minor concern for principals and staff in some schools and in others, a central focus. Some schools developed very specific expectations for students, for example, "students should be engaged in learning or look engaged at all times" or "no backpacks on desks." Other schools have dress codes designed to "keep students safe and to teach students how to dress properly in a formal situation."

Site visit observation: Teachers carry the primary weight of innovations, and, along with principals, often work very long hours.

Teachers are the primary implementers of the day-to-day operations of innovative schools. Some national innovative strategies concentrate on resources other than teachers—for example, Power My Learning[31] relies on technology—but the designated innovative schools in Washington concentrate on innovations driven by teachers.

For most schools, teacher-student ratios remain the same as pre-innovation. What changed with the innovation, therefore, was not the number of teachers, but rather, what the teachers do in the classroom. Often, teachers are expected to bring additional dimensions to their teaching, by using versions of project-based learning, for example, or providing individualized attention toward students. Because of the increased expectations, many teachers described their work in the innovative school as the "hardest job" they ever had.

The "expected teacher characteristics" for Lincoln Center is an example of the expectations placed on some innovative school's staff (see Exhibit 13). In addition to substantial extra time, the expectations cover personal characteristics ("grittiness") and specifically describe what is meant by "working collaboratively."

[30] http://www.k12.wa.us/InnovativeSchools/DesignatedSchools.aspx

[31] http://opinionator.blogs.nytimes.com/2012/09/19/a-digital-tool-to-unlock-learning/?_r=0

The Lincoln Center model concentrates on additional student learning time. One of the co-principals noted that the school's teachers need to be excellent, because more time with a marginal teacher will not change learning outcomes.[32]

Another example of staff expectations can be found in the "Toppenish Middle and High School Plan for Excellence Proposal."[33] This document describes the expectations for principals and teachers, and identifies the expectations for educators, including:

- All staff members refer to students as "our kids" as opposed to "these and those kids;"
- Teachers use at least three formative assessments to drive and adjust instruction; and
- Each school's learning team analyzes data and student work to plan instruction.[34]

Because many innovative school models concern the whole school rather than individual classrooms, teachers at these schools often need to dedicate time to school-wide policies and procedures. Some examples include student behavior policies, technology solutions, school calendars, and extra-curricular activities. Many teachers we met expressed appreciation for the opportunity to influence school operations and had a strong investment in "making things work" day to day.

Exhibit 13
Expected Teacher Characteristics at Lincoln Center

Reliable

- Solid record of attendance
- Able to commit to Saturday and summer work
- Grittiness

Informed Instructional Practice

- Best practices in given content area
- Standards-based instruction
  - College Knowledge Standards or Common Core
  - Rigorous, standards-based curriculum
  - Standards-based grading
- Uses data to inform practice
- Employs a thematic approach to planning their work

Willing to Work Collaboratively

- Takes the lead on after-school and Saturday Cultural Learning Experiences
- Honors the existing work in order to replicate success
- Opens their doors for collaboration and observation
- Works in a give-take relationship with the grade level cohort team
- Creates and maintains constant contract with parents and community
- Identifies and addresses problems with solutions

Demonstrated Record of Success in the Classroom

- Succeeds with students who have failed in other settings
- Earns the respect of peers
- Cultivates relationships with students and their families

Belief in Own Efficacy as well as That of Their Students

- Believes that all students can and should succeed
- Believes that teachers can impact student motivation and learning

Source: http://www.tacoma.k12.wa.us/sites/schools/Lincoln/activities/Documents/LC_Handbook12_13.pdf

[32] Greg Eisnaugle, personal communication, June 2013.
[33] http://www.toppenish.wednet.edu/documents/THS-TMS%20Plan%20for%20Excellence.pdf
[34] Ibid, pages 2 and 3.

Site visit observation: Innovative schools require a staff invested in the school's mission and model.

Some designated schools opened with their innovations on the first day; in others, an existing school was transformed to accommodate the innovation. For the "day one" innovative schools, the staff was typically hired with a strong understanding of the school's mission and operating philosophy. In some instances, the staff had a voice in selecting the innovation, while in others, the innovation was "top down," selected by either the district or a principal.

Principals involved in transforming a school with existing staff typically need one-to-three years to build capacity and buy-in. For one principal who encountered periodic resistance from his staff, a key intervention occurred when he asked staff to choose between two lines in the hallway and decide whether to stand with the group that believed their students could become capable learners, or if they believed that this goal was not possible and therefore choose the other side of the hallway.

In implementing a new innovation, principals often relied on a core team of teachers who shared the school's vision and played key roles in bringing other staff members on board. During many site visits, we met teachers who were passionate and eloquent about the school's mission.

For schools that created new norms and practices with a stable school staff, the introduction of new staff can pose challenges, particularly if the newcomers did not choose the placement. Innovative school staff mentioned examples of difficulties with some newly assigned staff, including individuals who were unwilling to work the necessary hours, resisted collaborative efforts, or did not connect well with the students.

As a remedy, some schools reached formal agreements with the district allowing them some control over staff assignments to the school. In the West Valley School District, the district's collective bargaining agreement allows individual schools to seek exceptions to staff placement policies when 75% of the association members and the principal are in agreement; these waivers last for up to one year. Spokane Valley High School used this exception policy for several years in staff placement decisions.

The Washington Youth Academy also has a formal exception to the Bremerton School District collective bargaining agreement. This quasi-military school is recognized by the district as a "unique working environment" and the school's director approves all staff assignments.[35]

Many agreements are informal, typically an unwritten understanding between the superintendent and the principal. Because both formal and informal agreements can be changed in the future, school leaders expressed some uncertainty about whether their arrangements would be ongoing.

The Tacoma School District created a comprehensive solution for staff assignments which applies across the district. Following a teacher's strike in 2011, the district and union agreed to form a joint committee charged with developing a new process to re-assign teachers displaced from schools. The strike settlement agreement outlines the committee's purposes, incorporating two caveats to the group's decisions:

- The new teacher selection method could no longer rely on seniority as the primary factor; and
- Six of the nine committee members must agree to the new method.[36]

The committee reached agreement on a new system in June 2012. Under the new system, seniority is the last, tie-breaking factor in determining which teachers are displaced from a school. The policy starts by having each school develop individual statements of their mission and focus. Teachers produce self-reports showing how their skills and credentials

[35] Washington Youth Academy application for innovative school designation; interview with WYA staff.
[36] http://www.tacoma.k12.wa.us/news/Pages/Tacoma-teachers-and-principals-will-have-a-new-system-to-help-them-find-the-best-match-between-the-needs-of-each-school-and.aspx

fit the school's mission and focus and are expected to show some evidence of how their instruction improves student learning.

Each spring, the district releases enrollment projections and staffing needs for each school.[37] Under the new agreement, decisions about which teachers are displaced takes account of the match between teachers and school mission along with the teachers' contributions to student learning. In some cases, teachers can choose to displace themselves. No school can displace a teacher on a plan of improvement due to performance issues.

An Additional Example from Seattle. The role of displaced teachers also emerged as a focus in Seattle Public Schools with their "Creative Approach Schools." This category of schools was created during negotiations between union and district leaders over the 2010 teachers' contract. "Creative Approach" schools can apply to the school board for broad exceptions to district policies and collective bargaining agreement in return for enhanced autonomy and accountability. The schools must include broad participation of family and community members in developing the overall plan for the school. Additionally, 80% of staff at each school must approve the Creative School application.[38]

Six Seattle schools applied under the Creative School policy:

- Cleveland High School: STEM curriculum with a modified block schedule;
- Hawthorne Elementary: science, technology, engineering, arts and mathematics (STEAM);
- Nova High School: combined 7-12 model, competency-based education and action, inquiry-based education;
- Thornton Creek Elementary:[39] integrated project expeditions with writing instruction;
- Seattle World School: focus on English language learner needs; and
- Queen Anne Elementary: project-based learning, self-directed learning, and critical thinking skills.

Each applicant school requested exemptions from Seattle's collective bargaining agreement concerning forced placement of displaced teachers.[40] The waivers were approved by the school board in February 2013.[41]
When Cleveland High School applied for designation as a "Creative Approach School,"[42] their justification mirrored comments heard during our visits to innovative schools:

> "At this point we are a school so different from the usual comprehensive high school that students and families must opt into our program; it would make little sense for staff to work here for any reason other than their choice to take on our unique curricula, teaching, and learning structure."[43]

[37] On average, one or two teachers per year are displaced at each school.
[38] http://www.seattleschools.org/modules/groups/homepagefiles/cms/1583136/File/Departmental%20Content/school%20board/Friday%20Memos/201112/Dec%2016/20111216_Creative_Approach_Schools_Criteria.pdf
[39] Thornton Creek is an existing innovative school.
[40] http://www.seattleschools.org/modules/groups/homepagefiles/cms/1583136/File/Departmental%20Content/school%20board/12-13%20agendas/022013agenda/20130206_Minutes.pdf
[41] http://www.seattleschools.org/modules/groups/homepagefiles/cms/1583136/File/Departmental%20Content/school%20board/12-13%20agendas/022013agenda/20130206_Minutes.pdf. Two "Creative Approach Schools" applied for additional waivers to district policy, including block scheduling and class size; and high school grade and credit marking.
[42] http://seattletimes.com/html/localnews/2017845837_creativeapproachschools27m.html
[43] Cleveland High School, Creative Approach Schools Application, Seattle Public Schools, p. 13. http://www.seattleschools.org/modules/groups/homepagefiles/cms/1583136/File/Departmental%20Content/school%20board/12-13%20agendas/012313agenda/20130123_CAS_ClevelandApplication.pdf

District Support

Site visit observation: For an innovative school to develop and flourish, support from district leaders is essential.

During the site visits, many school leaders discussed the importance of assistance from the school board, superintendent, and district central office.

Some of Washington's designated innovative schools operate in districts with an expansive view of school autonomy, encouraging school leaders to break new ground. Others have emerged in districts with strong central controls. In these instances, the innovative schools are particularly dependent upon relationships with school board members and/or superintendents to continue their operation. When these individuals change, the school's future can be threatened.

Because innovative schools by definition are doing something different from traditional schools, the district must decide how to support the school while maintaining a sense of equity among the other schools. The research literature concerning innovative schools stresses the sensitivity of this balancing act.[44]

Some districts adopted specific strategies to encourage innovation. For example, when Tacoma Public Schools began their innovative school initiative, the superintendent understood that schools undertaking non-traditional activities would encounter situations where they needed district services and permissions outside the norm and would need decision-making authority from a high-level administrator. Thus, he proactively identified the deputy superintendent as the decision-maker in these instances.[45]

Similarly, in the Marysville School District, the superintendent wanted to transform the central office from discouraging innovation into providing support and assistance. With this initiative, schools encountering barriers in district procedures could request a meeting with the superintendent and district office staff; the parties would meet at the school building. The goal of the meeting was framed as "figuring out how to say yes."

According to the superintendent, this process was effective in finding resolution to school's individual situations. "The intent was to change the system to accommodate the school rather than change the school to accommodate the system."[46]

Community Partnerships and Support

Site visit observation: In a majority of the innovative schools, partnerships with organizations, businesses, and individuals contribute significantly to daily school operations.

Community partnerships increase the number of adults interacting with and contributing to students' education and personal development. They fall into two categories: (1) services and support to the school with school leaders maintaining leadership and control, and (2) partnerships that lead in the development, funding, and operation of the school.

A good example of the first category of partnerships is First Creek Middle School, where a "wraparound" approach to services involves contributions from multiple community organizations.

The multi-district STEM schools (Aviation and Delta High) fall into the second category. For these two schools, industry and business leaders played essential roles in the schools' creation. These outside advisers provide political will and resources, navigating the complex decision-making structures associated with multiple school districts. They are also essential when it comes to a physical location for the school; schools that accept students from multiple districts cannot rely on typical funding sources for school buildings.[47]

[44] Allison Reed, 2013. "Innovation schools: What can Washington learn from other states?" http://www.wsipp.wa.gov/rptfiles/Reed2013.pdf

[45] Art Jarvis, personal communication, January 2013.

[46] Larry Nyland, personal communication, January and July 2013

[47] http://www.tri-cityherald.com/2013/05/28/2412270/state-approves-money-for-new-delta.html

The Tacoma School of the Arts Partners is another example of a community organization that exists to support an innovative school. The organization's goal is to connect educators and administrators with local decision-makers, in order to "change the way that education is delivered"[48] and increase student learning in Tacoma Public Schools. Members include individuals from the civic, political, arts, higher education, and business communities. The non-profit supports the following activities associated with the school:

- Gatherings of parents and community members to discuss school issues;
- Adjunct artists who teach classes, mentor students, and work alongside certified teachers;
- The "Bridges" program that uses peer tutoring to allow students of all abilities to participate in regular classrooms;
- Partnerships with Metro Park to offer classes, camps, and performances through the Metropolitan Arts Academy; and
- Scholarships and fellowships for students, artists, and community activists to access education and opportunities.

Parental Support and Involvement

Site visit observation: Parental support for some innovative schools is very high.

For the district-option innovative schools, parents and students choose to enroll. Often, these schools have active parent involvement programs that are very influential in the school's operation. Many schools' parent groups have organized separate non-profit organizations to raise additional funds for the school. Some of these parent groups raise tens of thousands of dollars for the school, planning and executing sophisticated fundraising events.

A high level of parental involvement is seen in the IB, Montessori, arts, and STEM schools. Because schools with these missions often require additional resources for programs and materials, support from parents is frequently critical to continuation of the innovation.

According to school leaders interviewed for this report, innovative schools located in low-income neighborhoods often have to dedicate special attention to create a base of parental support.

Challenges for Innovative Schools

Site visit observation: Existing innovative schools have overcome several challenges.

Several of the school leaders interviewed identified an initial set of barriers when first contemplating an innovation, in particular, budgets, buildings, and buses. The schools in this study are able to manage challenges, with examples that follow.

- **Budgets**: Some schools supplement their resources through grants from the federal government, private foundations, business and industry, and private benefactors. Other schools primarily rely on their basic education allocation.
- **Buildings**: For start-ups, dedicated space is needed. The physical locations for the schools vary from brand new, purpose-built settings to rented space from colleges and churches, to old school buildings. Two STEM schools are involved in significant fundraising campaigns for dedicated building space.
- **Buses**: Transportation for students who are not in walking distance may need to be arranged. For many district-option schools, the district provides transportation to the designated innovative school from the neighborhood school. For schools in urban areas, public transportation offers additional options for students. Schools that involve parent partnerships rely on parental transportation.

Almost all designated schools use instructional time in a different way, including use of block schedules, mini-terms, extended days, or other calendar adjustments.

[48] http://www.guidestar.org/PartnerReport.aspx?ein=91-2168988&Partner=Amex

For the designated innovative schools, technology provides both opportunities and challenges. Many schools experiment with technology, using it for a variety of purposes. Some schools use iPads in every classroom. Others use online learning sources to provide students with individualized instruction. For the arts schools, technology is applied in a wide-range of mediums from film to photography to sound studios.

Several schools negotiate with district technology officials to allow non-standard equipment and security provisions. In one school, staff and students are allowed by the district to use non-standard equipment, but must accept full responsibility for resolving issues that emerge.

Site visit observation: Innovative schools have requested few formal waivers from state organizations and local collective bargaining agreements.

The SBE and OSPI have authority to grant waivers from state laws and rules pertaining to basic education requirements, student-to-teacher ratios, and length of the school year. The start-up innovative school legislation did not expand the authority of these organizations to grant waivers but did change the burden of proof for some waivers.

The legislation directed the SBE and OSPI to conduct an expedited review of the innovative schools/zones request. The SBE could only deny waivers if it concluded that the waiver would jeopardize receipt of federal funds, violate state or federal law or rules, or implementation of the waiver would likely result in decreased student achievement.[49]

Of the 11 schools and one school district applying under the start-up legislation, only two requested new waivers of state laws and regulations:

- Stewart Middle School (Tacoma): requested a waiver of 16 days from the 180-day requirement. The school operates with an alternative calendar, relying on an extended block schedule with four periods per day and eight classes per week. Students take eight classes per semester and two project-based mini-courses per year.

- Odyssey High School in the Highline District requested a waiver from credit-based graduation requirements. Odyssey uses an alternative grading system, allowing students to learn at their own pace and demonstrate mastery of content using an annual portfolio process. In addition, the school requested three waiver days from the school year calendar. The days allowed teachers to meet collaboratively and write narrative assessments of student learning

The SBE approved both requests for school years 2012-13 through 2018.

In addition to the new waivers requested by the start-up schools, some schools had previously approved waivers, particularly regarding school calendars. For example, in 2011, the Tacoma School District received a renewal on its 12 waiver days for the 2011-12 school year for SOTA and SAMi and eight days for Stewart Middle School. The district justified the waivers because the three schools had longer school days that allowed for increased instructional time, additional classes, and student access to academic help and community experiences such as internships and mentor groups.[50]

Bonney Lake High School received a waiver from the SBE regarding student seat time to allow a hybrid block schedule that separated 9th and 10th grade teams from upper classes.[51]

Designated innovative schools also received waivers from their district policies and/or local collective bargaining agreements. From our site visits, we learned about three schools with local waivers:

- *Delta High School*: Teachers from three school district bargaining units work at the school, thus adjustments to the collective bargaining agreements were necessary.

[49] Washington State Board of Education, February 23, 2013 meeting, "Innovative Schools/Zones Waivers", p. 3.

[50] http://www.sbe.wa.gov/documents/2011.05.11-12%2007%20Waiver%20Requests%20and%20Revisions%20to%20Process.pdf

[51] Bonney Lake application for start-up school innovative designation, p. 4.

The school also has a "seat time" waiver to award credit hours on a block schedule. Students attend five classes per trimester; these classes have slightly fewer hours than the state guidelines. The three districts work collaboratively to award waivers for district course requirements and to hold Delta students accountable.

- *Spokane Valley High School:* This school has three collective bargaining waivers for preparation time, work schedules, and calendar. The teachers have 50 continuous minutes of preparation time each day, may combine their preparation time into Professional Learning Community time, and must be in the building at least 30 minutes prior to the start and end of the day.
- *Summit School*: The school has district waivers to increase their flexibility in assigning FTEs in their building, a different structure for staff collaboration time, modification of reporting instruments, adoption of a curriculum model organized by expedition, and adjusted staff allocation models.

In the applications from some ALE schools, the school leaders note that the state's requirements for this category of schools allowed sufficient flexibility so they did not need waivers or exemptions.

Why do we see so few designated schools with waivers from state, district, and collective bargaining requirements? From our site visit observations, we identify two answers to this question. First, for the existing schools, the school's creators focused on structures and practices that could be achieved without formal waivers. Uncertainty would have been attached to such special permissions, and could have delayed implementation of their school.

Second, some leaders operate with significant support from district leaders who "paved the way" and resolve issues so that formal agreements are not needed. In other instances, external forces such as stakeholder groups exert influence on decision-makers to create solutions.

Site visit observation: Traditional concepts of boundaries and attendance areas are challenges for innovative schools and districts.

In districts that assign students to schools by geographic boundaries, adding option schools provides new choices and challenges. According to those interviewed, district officials need to attend to potential consequences such as the following:

- Student attendance at innovative schools may result in perceptions (or reality) of fewer students and loss of funding in the home school or district.
- Neighborhood schools that lose students to option schools may perceive loss of their highest achieving students and most involved parents.
- A student selection process may be perceived as "elitist" even when careful mechanisms exist to assure broad representation. If the school relies on selection criteria focused on student academic performance alone, the student population may end up out of balance in terms of racial, poverty, and gender factors. In addition, the school population may not represent the district geographical distribution. Other selection procedures such as lotteries may be needed to bring the population into balance.
- Innovative schools housed outside of the sponsoring districts are particularly susceptible to inter-district conflicts.

Site visit observation: The innovative designation is interpreted differently among various schools.

For the designated schools, the state's "innovative school" award is viewed with a mixture of attitudes. In all cases, the banners are displayed in the schools and the award is acknowledged on school websites. For many schools, however, the status as a designated innovative school is of minor significance. These schools received other awards and are recognized by multiple audiences as an excellent school deserving attention.

The award serves a more robust purpose in schools seeking external validation for purposes of public reputation and/or district support. Alternative and parent-partnership schools, in particular, value the award as a counterweight to the stereotypes many people have about this category of schools.

Site visit observation: For schools receiving Title 1 funds, federal requirements regarding highly qualified teachers are seen as an obstacle.

The Elementary and Secondary Education Act (ESEA) requires that teachers of core academic classes meet "highly qualified" teacher requirements. The federal definition of a highly qualified teacher is one who meets all of the following criteria:

- Fully certified and/or licensed by the state;
- Holds at least a bachelor degree from a four-year institution; and
- Demonstrates competency in each core academic subject area in which the teacher teaches.[52]

The relatively small designated innovative schools identified this requirement as a challenge. For parent partnership programs, the requirement is a burden when parents have teaching roles; typically, the parents have high educational and professional accomplishments but lack certification credentials.

[52] http://www.k12.wa.us/titleiia/highlyqualifiedteachers.aspx

SECTION 5: SUMMARY AND NEXT STEPS

This study examines Washington State's designated innovative schools: characteristics, challenges, student performance on state assessments, and the research evidence related to the effectiveness of the schools' selected innovations.

Key findings are as follows.

Section 1: How are the designated innovative schools selected and what are their innovations?

The existing innovative school designation was intended to recognize schools that encourage "bold, creative, and innovative" education ideas; evidence of improved student performance was not required. For the start-up designation, the application process asked schools to identify multiple measures for evaluating student achievement performance with annual reports on progress; no specific criteria were set.

Washington's designated innovative schools are extremely varied in their missions, student populations, selected strategies, and outcomes. The designated innovative schools have a range of goals, including:

- Increase educational choices for families in the school district;
- Increase college and career opportunities for disadvantaged youth;
- Increase the graduation rate;
- Increase opportunities for students to feel a personal connection to the school;
- Engage more students in learning, connecting school lessons with the world beyond the classroom;
- Increase the number of adults serving as mentors and adjunct instructors; and
- Increase students' preparation for and interests in STEM careers.

Section 2: Do the designated innovative schools result in improved student achievement?

Given the small number of designated innovative schools and the self-selection of students into some schools, we are unable to determine how particular innovations have contributed to student outcomes.

Instead, we assess whether these schools are high performing on Washington's standardized math and reading tests, given student characteristics and prior achievement.

We find no evidence that test score outcomes for the designated innovative schools *as a group* are different from other schools in Washington State.

We also examine results at the school level and find that test score performance varies substantially. Some schools achieved higher than expected outcomes given their student characteristics. Others have not. Four schools stand out in terms of consistently positive value-added effects.

- The highly selective schools—Aviation High and Vancouver School of the Arts—have very large positive value-added test score effects, and their students enroll in an impressive array of advanced courses.
- Sammamish High School achieved above average value-added effects in math and reading. Advanced Placement (AP) enrollment is exceptionally high at the school, even among low-income students.
- The Sky Valley Education Center has large positive value-added effects in both reading and math.

Others, noted below, perform highly in some areas.

- The Lincoln Center and Helen B. Stafford, which serve largely minority and low-income student populations, achieved above average value-added effects in math.

- Spokane Valley High School achieved a relatively high graduation rate and strong value-added effects in reading.

It should be reiterated, however, that the data available for this study do not allow us to determine whether these are cause-and-effect results or simply correlations.

Section 3: Do the designated innovative schools use evidence-based strategies?

We systematically review the broader research literature on innovations selected by the designated schools. Three conclusions from this evidence review are particularly noteworthy:

- Innovation alone does not guarantee increased student achievement. The mixed results for charter schools mirror the variation we found in existing innovative schools. Similarly, some curricular approaches, such as expeditionary learning, also have mixed impacts on student test score performance.
- The evidence underscores the central role of school personnel. Above-average principals positively impact student achievement. Similarly, certain approaches to teacher training and support, including NBPTS certification, content-specific professional development, and mentoring, are associated with improved student test score outcomes.
- Programs that encourage pro-social behavior and high expectations for all students can positively impact student reading and math scores.

Section 4: What can be learned from the designated innovative schools' experiences?

We conducted site visits at 25 designated innovative school sites and the district-wide innovative zone in Tacoma. During a typical two-to three- hour visit, we met with the principal and key staff, toured the building, and spoke with teachers and students.

We met many exceptional educators deeply committed to schools that support and inspire student achievement. Most principals and teachers in the designated innovative schools work exceptionally long hours and continually set a higher bar for themselves following each success.

The designated innovative school leaders believe they require a staff deeply invested in the school's model. For this reason, many schools have arrangements with their district regarding the placement of new staff; some of these arrangements are formal but most are informal.

Most designated schools have not requested formal waivers from state organizations and local collective bargaining agreements. For the existing schools, their creators primarily focused on structures and practices that could be achieved without requiring adoption of formal waivers.

Some district leaders "paved the way" for the designated schools, resolving issues so that formal agreements are not needed. In other instances, parents or business groups influenced decision-makers to create solutions.

In a majority of the innovative schools, partnerships with organizations, businesses, and individuals contribute significantly to daily school operations.

Next Steps

The 2013 Washington State Legislature continued funding of the innovative school recognition. The state operating budget includes $20,000 for OSPI to select additional existing and start-up innovative schools in the 2013-15 biennium.

The state's policy environment for school innovations was expanded in November 2012 when voters approved an initiative allowing up to 40 public charter schools.[53] The schools will be independently managed public schools operated by qualified nonprofit organizations.

A newly created state commission or local school boards may authorize charter schools. Authorized schools will receive standard per-student public school funding and be open to all students without tuition. While subject to teacher certification requirements, government oversight, and performance reporting requirements, the schools will be exempt from certain state laws and school district policies. Charter schools will operate under five-year contracts and will be required to show progress toward meeting targets for student academic growth

Ultimately, Washington will have both designated innovative and charter schools. As the state reviews the existing and start-up innovative schools and selects additional schools for this designation, setting clear targets for student academic growth could add important dimensions to the meaning of the "innovative school" label.

[53] Initiative Measure 1240, Chapter 2, Laws of 2013.

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