Making Connections for Youth in Washington State: The Role of Data in Developing Sound Public Policy

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The Role of Data in Developing Sound Public Policy

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Do Washington’s standards for teacher training institutions lead to the employment of more-effective teachers? Are Washington’s investments in child nutrition helping disadvantaged students be successful in school? Is the new Professional Certificate required of Washington’s experienced teachers related to student learning?

In broad terms, all of these questions deal with the extent to which Washington State’s public policies and investments help improve the lives of its youth. And, like policymakers around the country, Washington State legislators are asking questions about how various state programs and policies relate to student learning. In fact, recent legislation illustrates these lawmakers’ desire to evaluate programs and policies based upon connections between the state’s investments in Washington’s youth and the success of those investments.

For example, in 2007, the state legislature passed legislation offering bonuses to public school teachers who meet the “rigorous, performance-based assessment process” of the National Board for Professional Teaching Standards (NBPTS). And, current regulations on teacher certificate endorsements are predicated on teachers “who are able to demonstrate a positive impact on student learning.” The 2007 legislative session also resulted in a call for the Professional Educator Standards Board to show that teachers have “evidence of positive impact on student learning.” Following that, in 2010 the state legislature passed Senate Bill 6696 that will require districts with schools performing in the bottom five percent “in terms of proficiency on the state's assessment” to submit an action plan identifying measures that will be taken to improve student achievement at these schools.
Student outcomes are also being tied to teacher performance. For example, Senate Bill 6696 mandates a new teacher evaluation system that includes a category on “using multiple student data elements to modify instruction and improve student learning.” These student data elements can include “classroom-based, school-based, district-based, and state-based tools.” This follows 2007 legislation approving English as a Second Language Projects, aimed at “[i]dentifying components of a professional development program that builds classroom teacher competence for developing academic English skills in English language learner students.” Earlier bills that outlined pilot programs for alternative routes to teacher certification (2003’s Senate Bill 6052 and 2001’s Engrossed Second Substitute Senate Bill 5695) also called out the need to identify “one or more tools to be used to assess a candidate’s performance once the candidate has been in the classroom for about one-half of a school year.”

While these legislative examples do not explicitly state that “state-based tools” will include Washington’s mandated student assessment – either the Washington Assessment of Student Learning (WASL) before 2009 or the Measurements of Student Progress (MSP) and High School Proficiency Exams (HSPE) after 2009 – it makes sense that the state would use these exams, which are explicitly designed to measure the extent to which students can demonstrate knowledge of the state’s academic standards, as one of multiple possible metrics to judge the success of its investments.

Given the vast amounts of data that the state collects about students and their teachers, it is possible to empirically answer questions about the value of investments in youth with a reasonable degree of certainty. But it is far easier to say that investments in children should be judged against their impact on measured student learning than it is to
do so, because doing so requires a data structure that supports careful empirical analyses. In particular, any broad-based, student-outcome-related judgments that are made about interventions related to teachers (for example, the effectiveness of teacher training, professional development, licenses, or certificates) requires that *data on student outcomes be linked directly to data on teachers at the individual student-teacher level.*

Why is this necessary? Simply put, it is not possible to draw credible student-outcome based inferences about various policies unless the available data match teachers to their individual students. In the absence of such a linkage, one does not know how to assign particular student outcomes to particular teachers, which in turn means that it’s not possible to determine how or whether students have been educationally influenced by teachers who hold specific credentials or training. Moreover, a significant amount of empirical work shows that the absence of individual level student-teacher links over time can (and does) lead to erroneous conclusions about the impacts of various *school-level* educational investments. ix

Unfortunately, research on educational policy interventions in Washington is hamstrung to some degree, because the various datasets that are collected by the state cannot easily be linked to one another. Fortunately, the Washington legislature is taking important steps to address this issue. The 2007 legislative session required that, beginning in the 2008-2009 school year, each school district must report details about which courses are taught by which teachers in a school, and which students are enrolled in these courses, to the Office of the Superintendent of Public Instruction (OSPI). The legislature also authorized (in Substitute Senate Bill 5843) the OSPI to “establish a longitudinal student data system,” the purpose of which is “to better aid research into programs and
interventions that are most effective in improving student performance, better understand the state’s public educator workforce, and provide information on areas within the educational system that need improvement.”

This was followed by more specific legislation in 2009 (Senate Bill 5941) that specifies that the data set will include comprehensive and linkable educator, certification, course, student, and financial information, as well as “the capacity to link program cost information with student performance information to gauge the cost-effectiveness of programs.”

These student, teacher, course, and financial linkages should enable the state itself to make better judgments about the effectiveness of public dollars spent on its youth, and in turn make smarter future investments. Additionally, to the degree that data are shared with the research enterprise (in ways that adequately protect the privacy of students and teachers), these linkages will facilitate private sector and philanthropic efforts to improve the lives of Washington State’s youth. Research on educational programs that utilizes linked data from Florida, New York, North Carolina, and Texas, and which is partially financed through philanthropic enterprises, shows that much can be learned about crucial topics such as teacher training, teacher licensure requirements and certifications, and the teacher labor market.

Washington State has not as yet been the beneficiary of this kind of research, but there are some golden opportunities available that could be capitalized on. For example, the Carnegie Corporation of New York, along with support from the Annenberg and Ford Foundations, has bestowed large multi-year grants to a small number of teacher training institutions as part of its Teachers for a New Era (TNE) initiative, one of which is the University of Washington. The ultimate goal of TNE is to improve teacher training by
creating models of excellence. A key design principal underlying this effort is the notion that training institutions should pay attention to the “pupil learning gains accomplished under the tutelage of teachers who are graduates of the program.” This means that in order to understand how their training programs impact students, institutions should pay attention to the influence of their graduates who enter the teacher labor market.

But, as should be clear at this point, such judgments about the impact of teacher training can only be made if teachers are linked to students, and in this particular case, if those teachers are also linked to where they were trained. In Washington State, this has been difficult because the University of Washington’s TNE research team has been unable to obtain student-teacher links from OSPI. Thus, the state’s flagship university, which has expressed an interest in pursuing program improvement through analyses on how its graduates perform in the classroom, is greatly hampered by its inability to obtain information about the classroom performance of its graduates (as measured by the gains of their students on the WASL). More generally, this situation clearly means the state has no direct way of holding its institutions accountable for the quality of teachers they produce or knowing much about whether its investment in teacher training is effective—thus putting Washington State behind the curve when it comes to assessing the impacts of teacher training. Meanwhile, other states such as Florida, New York, Ohio, and Texas are already conducting research that examines the contributions of teacher training and the value of particular teacher practices.

The bottom line is that, like roads, data is more valuable the more it can link various sources of information together. Thus, Washington State’s datasets need to be able to talk to each other in order to fully harness the power of empirical analyses and
consequently ensure that the state’s investments and public policies are based on the best possible information, and that taxpayer dollars are being used efficiently. Although the legislature has begun to address the fragmentation both within the state’s K-12 data and between K-12 data and early learning and higher education outcomes\textsuperscript{v}, if one takes a step back it quickly becomes clear that the education data is disconnected from other state data on inter-related topics such as youth health programs, experiences with the criminal justice system, and labor market outcomes. And so, while investing in nutrition to help kids do better in school makes sense, and while we know that kids who do well in school have better opportunities later in life, we can’t really know how well different types of investments are working without connecting the dots between all of the state’s various data systems.

The details of school reform in Washington State continue to evolve, but the unprecedented performance demands that it and NCLB place on schools are unlikely to disappear any time soon. The same is true of the large gap that exists between today’s performance and tomorrow’s aspirations. By any measure, significant improvements in performance now have a permanent place on Washington State's agenda for youth. If Washington is going to take these aspirations and their accompanying challenges seriously, it needs (among many other things) informed advice based upon adequate data and careful objective analysis. Right now, getting such advice isn't easy – in fact, it's almost impossible. This is because the immense amount of data that Washington collects on issues related to education and youth – including data about students and teachers, but also about the labor market and health initiatives – is largely an uncoordinated mixture of isolated facts.
In the end, the promise of well thought-out and rigorous research that can help policymakers develop serious answers to the aspirations and challenges surrounding Washington State’s youth depends on assembling these scattered bits and pieces of information into a single youth-focused data repository. Such a repository would allow the state to better harness the power of empirical analyses, as is already being done in numerous other states, to ensure that Washington’s investments and public policies are based on the best possible information, resulting in the most effective use of taxpayer dollars.
References


iii Second Substitute Senate Bill 5955, Chapter 402, Laws of 2007 (60th Legislature), Approved May 9, 2007, p. 3.

iv Senate Bill 6696, Chapter 102, Laws of 2010 (61st Legislature), approved March 11, 2010, p. 3.


vi Engrossed Second Substitute Senate Bill 5841, 60th Legislature, p. 6.


viii Under the WASL students were tested each spring in grades 3-8 and 10 in reading and math; in writing in grades 4, 7 and 10; and in science in grades 5, 8 and 10. Under the new testing system, the MSP tests students in reading, math, and science in grades 3-8, while the HSPE measures the proficiency of students in high school and serves as the state’s exit exam. For more information about the WASL and other state assessments, see http://www.k12.wa.us/assessment/.

ix For more detail about this issue, see Goldhaber (2007a).

x Engrossed Second Substitute Senate Bill 5843, Chapter 401, Laws of 2007 (60th Legislature), Approved May 9, 2007, p. 2. This bill followed legislation that was approved in 2006 (Engrossed Substitute House Bill 3127, Chapter 116, Laws of 2006, Approved March 20, 2006, pp. 2-3) that re-authorized funding for OSPI’s Center for the Improvement of Student Learning, saying that the office should develop “systems to analyze student assessment data, with an emphasis on systems that will combine the use of state and local data to monitor the academic progress of each and every student in the school district” and “other programs and practices that will assist educators in helping students learn the essential academic learning requirements.”

xi Second Substitute Senate Bill 5941, Chapter 1, Laws of 2009 (61st Legislature), approved March 9, 2009, p. 3.

xii See Boyd et al. (2006); Clotfelter et al. (2006, 2007); Goldhaber (2007b); Goldhaber and Anthony (2007); Goldhaber, et al. (2007); Harris and Sass (2006); Kane (2006).

xiii See “About Teachers for a New Era” at http://www.teachersforaneuwera.org/index.cfm?fuseaction=home.aboutTNE.

The Education Research and Data Center within Washington’s Office of Financial Management has begun including data from pre-kindergarten through higher education to conduct analyses across the entire P-20 system. See http://www.erdc.wa.gov/.