Washington Learns:
Successful District Study

Final Report

Prepared for
Washington Learns

Mark Fermanich
Michelle Turner Mangan
Allan Odden
Lawrence O. Picus
Betheny Gross
Zena Rudo

Lawrence O. Picus and Associates
4949 Auckland Ave.
North Hollywood, CA 91601

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WASHINGTON LEARNS: SUCCESSFUL DISTRICT STUDY

INTRODUCTION

The Successful District approach to school finance has traditionally established a set of school performance criteria and then used the expenditure level of school districts meeting those criteria as an estimate of the funding levels needed for all districts to meet those criteria. As part of our work with the Washington Learns K-12 Advisory Committee, Lawrence O. Picus and Associates was asked to conduct a successful district analysis. This document describes the findings from that analysis. In addition to a traditional successful district analysis, we have added a second level of analysis that increases the usefulness of the successful district approach. This enhancement to traditional successful district analyses was done by identifying school districts that meet an established set of criteria for success, and conducting in-depth case studies in a sample of nine districts and 31 schools that were identified through our initial work and through additional review as successful. The case studies were focused on how schools used resources and how their resource use practices were linked to their instructional improvement strategies. We are confident that these additional analysis of practices and linked resource use in schools and school districts will dramatically enhance the value of this study for Washington policy makers by mitigating one of the past difficulties identified with the successful district approach – the lack of information about how to best use resources to double student performance.

This document describes the results of both components of our successful district analysis. The first section reviews our initial state level analysis of all 296 districts in Washington, while the second section provides an in-depth look at the instructional improvement and resource use practices of 31 schools in nine school districts that our analyses identified as successful.

The state level analysis established 36 criteria for success. The study found that districts meeting between 24 and 36 of the criteria we used for selecting successful districts spent an average of $5,600 per pupil for the regular instruction program. This amount varied depending upon the number of criteria met and whether the state performance benchmarks for 2004-05 or 2007-08 were used. The districts that met all 36 criteria for success spent $6,789 per pupil. This compares to the state average spending of $5,422 per pupil. These expenditures represent spending for the regular education program, school and district administration, and general operations and maintenance. They do not include supplemental expenditures for students with special needs, disabilities or limited English proficiency, or for support services such as transportation, food service, or community programs. Further, it should be pointed out that the criteria used to determine successful districts are not as high as the goals that have been set by the Washington Learns K-12 Advisory Committee for their proposed new school finance system.

Our case studies on how schools used resources and how their resource use practices were linked to their instructional improvement strategies found that these successful districts made it a priority to focus all available resources on improving teaching and learning. Schools and districts employed reallocation of staff and scheduling redesign to provide for teacher collaboration, class size reduction, and extended learning opportunities. By focusing all of their resources toward improving teaching and learning, these districts were able to make significant and steady progress. Among the strategies for success that we developed were:

- Adoption of more effective, research based curriculum programs aligned with state content standards
- Improved instructional practice based on data and supported by professional development
- A commitment to data-driven decision making
- Provision of extended learning opportunities for struggling students

The first section of this report describes the findings of the district level analysis. We describe the methodology used to identify successful districts, and provide a detailed analysis of our findings. The second section offers an in-depth look at the findings from our case studies. The section provides a synthesis of instructional improvement and resource use practices that have been used by the schools and districts we visited to make significant improvements in student learning. Appendix A of this report provides several vignettes describing successful practices in schools and districts. All of the vignettes are based on our case studies, except the Kennewick school district vignette which was taken from a recently published book on that district's experiences. .

1. District Level Study

This section reports on the findings of the District Level Study conducted by Lawrence O. Picus and Associates for Washington Learns. More detailed information about the successful district approach to determining school funding adequacy and its application in Washington can be found in *Washington Learns: Briefing Document on a Successful District Approach to School Finance Adequacy* which is included as Appendix B of this document.

The Successful District approach to school finance establishes a set of school performance criteria and then uses the expenditure level of school districts meeting those criteria as an estimate of the funding levels needed for all districts to meet those criteria. Overall, we found that districts meeting between 24 and 36 of the criteria used for selecting successful districts spent on average $5,600 per pupil for the regular instruction program. This amount varied depending upon the number of criteria met and whether the benchmarks for 2004-05 or 2007-08 were used. This compares to the state average of $5,422 per pupil. These expenditures represent spending for the regular education program, school and district administration, and general operations and maintenance. They do not include supplemental expenditures for students with special needs, disabilities or limited English proficiency, or for support services such as transportation, food service, or community programs. The results of our fiscal analysis are presented in more detail in Section 3 below.

The sections that follow discuss the criteria used for selecting high performing districts, a brief description of the successful district analysis, a summary of the results, and our conclusions.

SELECTION CRITERIA

Based on input we received at the January 21, 2006 meeting of the Washington Learns K-12 Advisory Committee, we developed a total of 36 selection criteria consisting of 33 academic and three non-academic criteria. These criteria are described in more detail below.

Academic Criteria

A total of 33 academic criteria were used in selecting districts for the analysis. These consisted of:

- 27 criteria pertaining to student performance on the WASL. These consisted of the percentage of a district's students reaching proficiency or better on the WASL in reading, mathematics and reading/writing in grades 4, 7 and 10 for the years 2002-03 through 2004-05. The standard used for assessing adequate performance was the state's Uniform Bar Goals required under No Child left Behind (NCLB) for these three subject areas in effect in 2004-05. We also conducted the same

analysis using the Uniform Bar Goals that will become effective in the 2007-08 school year.

- A single learning growth index for each district for each of the three years. The OSPI annually calculates an index that indicates how well the average student in a district performs on the WASL. The index is based on the proficiency levels of Below Basic, Basic, Proficient, and Advanced. The percentage of students scoring in each of these performance categories is weighted by a multiplier and then divided by 100 percent to arrive at the district's index. The multiplier for students scoring Below Basic is 1, 2 for Basic, 3 for Proficient, and 4 for Advanced. The percentage of students not taking the test is assigned a multiplier of 0. While the state calculates a separate index for each grade and subject assessed by the WASL, we calculated a single index weighted by the number of students taking the WASL in each subject and grade for the years 2001-02 through 2004-05. For example, an index of 2.8 means that the average student scored just below proficient overall. If a district showed growth in its index from the prior year it was considered to have met the standard.

- A single achievement gap index for each district for each of the three years. This index was determined by calculating a separate learning growth index for ethnic minority students (American Indian, African American and Hispanic) and non-minority students (defined here as White and Asian). The change in the difference between these two indices from one year to the next was then calculated. If the difference, or gap, between the two indices decreased, then the district was considered to have met the standard.

Non-Academic Criteria

The non-academic criteria consisted of the district's on-time graduation rate for each of the three years 2002-03 through 2004-05.

SUCCESSFUL DISTRICT ANALYSIS

After the selection criteria were determined, district performance on each of the criteria was calculated and compared against a performance benchmark. At their January meeting the K-12 Advisory Committee requested that we conduct two separate analyses, one to evaluate districts using the NCLB Uniform Bar Goals in effect for the 2004-05 school year as the performance benchmarks, and a second using the 2007-08 Goals as benchmarks. The Committee also asked that we look at districts that were successful in meeting a range of criteria - from 24 of the 36 criteria to all 36 criteria. Our analysis examined districts meeting at least 24, 27, 30, 33, and 36 of the criteria. Table 1 below shows the NCLB Uniform Bar Goals for proficiency on the WASL for 2004-05 and 2007-08. The goals for the on-time graduation rate were 66% for 2004-05 and 69% for 2007-08. Our analysis also included the disaggregation of the results by poverty quartiles and district locale.

Table 1
2004-05 and 2007-08 NCLB Uniform Bar Goals
Percent proficient on WASL

	Grade 4		Grade 7		Grade 10	
	2004-05	**2007-08**	**2004-05**	**2007-08**	**2004-05**	**2007-08**
Math	47.3	64.9	38.0	58.7	43.6	62.4
Reading	64.2	76.1	47.6	65.1	61.5	74.3
Read/Write	56.0	71.0	50.0	67.0	56.0	71.0

Final District Sample and Excluded Districts

To avoid skewed results certain outlier districts were excluded from the analysis. These included small districts with fewer than 100 students, districts that did not serve all grades K-12, and six districts with a significant amount of suppressed or missing data. A total of 37 districts served fewer than 100 students and 46 districts did not serve grades K-12. This resulted in a combined total of 63 out of 296, or 21 percent of districts being excluded from the study. However, only 9,800 students, or one percent of the state total of 1.02 million students, were served by these districts. Excluding very small districts served two purposes. First, it avoided skewing the results of the fiscal analysis by eliminating the extremely high per pupil expenditure levels found in the smallest districts. Secondly, it helped to minimize the amount of suppressed data since the smallest districts tended to have very small groups and subgroups of students. The final sample of districts consisted of 233 of the 296 school districts serving 946,059 or 99 percent of the students in Washington.

Expenditure Categories Used in Analysis

While successful district studies typically look only at spending for the regular instruction program, the K-12 Advisory Committee was interested in looking more comprehensively at district spending. As a result, this analysis looked not only at expenditures for the regular instruction program, but also for categorical programs, federally-funded programs, and total expenditures. Additionally, the Committee was interested in seeing how voter-approved excess property tax revenues were distributed according to district performance. The following provides a breakout of the program areas included in the categories of regular instruction, categorical programs and federal programs. We should note that the state collects student enrollment data in several different forms. For this analysis we used full-time equivalent (FTE) enrollment counts, which is the enrollment count used by the state for funding purposes.

Regular instruction program. Expenditures for regular instruction totaled $5.1 billion, or $5,422 per FTE pupil. It consisted of the program areas:

01 Basic Education
97 District wide Support.

Categorical programs. This category totaled $1.4 billion, or $1,429 per FTE pupil in state and locally funded categorical programs for serving students with special needs. The program areas included were:

21 Special Education Support,
31 Vocational Education Basic,
39 Vocational Education Other
45 Skill Centers Basic
55 LAP
58 Special Programs/Pilots
65 Transitional Bilingual
66 Student Achievement
69 Other Compensatory
73 Summer School
74 Highly Capable, and
79 Other Instructional.

Federal programs. Federal program spending totaled $480.6 million, or $503 per FTE pupil. The program areas included here were:

24 Special Education Support
29 Special Education Other
38 Vocational Education,
46 Skill Centers
51 Disadvantaged
52 School Improvement
53 Migrant
54 Reading First
64 Limited English Proficiency
67 Indian Education JOM
68 Indian Education Other
76 Targeted Assistance
77 Eisenhower Professional Development, and
78 Youth Training.

Local property tax. In addition to state and federal revenues, districts are permitted to supplement their revenues with an excess property tax approved by the voters. The state also provides equalization aid, Local Effort Assistance, to districts with low property wealth to assist them in gaining more equitable access to these supplemental revenues. In 2004-05 the excess property tax totaled $1.2 billion, or $1,306 per FTE

pupil. The Local Effort Assistance equalization aid totaled another $162.9 million, or $173 per FTE pupil. Together, these supplemental revenues totaled $1.4 billion, or $1,478 per FTE pupil.

RESULTS

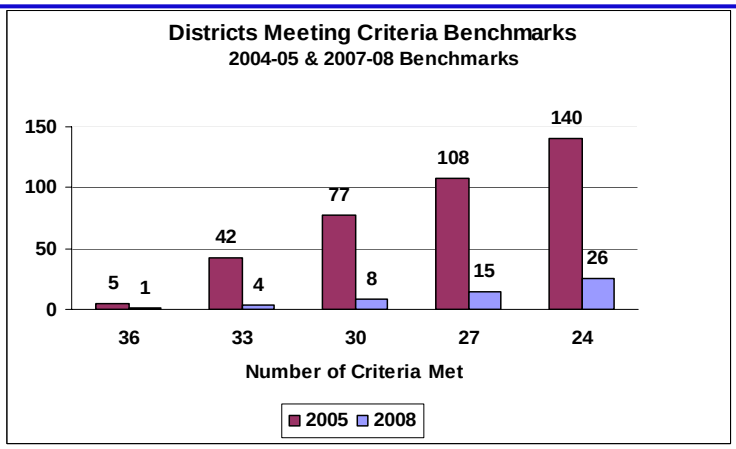
This section briefly discusses the findings in terms of the number and characteristics of districts meeting the selection criteria, their expenditure levels, and their use of the local excess levy. One issue that we had to address when evaluating districts against the performance criteria was the state's suppression of student performance data for groups of students fewer than 10. The OSPI suppresses these data to protect the confidentiality of students. This resulted in cases of missing data when analyzing subgroups of students based on ethnicity, particularly in smaller districts with few minority students. We decided that rather than excluding these records, we would assume that a district met a criterion if the underlying data element was suppressed. This prevented districts from being excluded on the basis of missing scores for a handful of students, in some cases as few as two or three. Only one or two percent of districts were affected for any one data element except in the calculation of the achievement gap index (discussed in more detail below), where the small number of ethnic minority students in many districts led to data suppression in up to 40-50 percent of districts for some subgroups.

Districts Meeting Criteria

Districts were evaluated using the criteria benchmarks for both 2004-05 and 2007-08. The chart below shows the cumulative number of districts meeting at least 24 to 36 criteria. For example, using the 2004-05 benchmarks, 140 of the 233 districts met at least 24 of the 36 criteria. Of these, 108 met at least 27 of the criteria, 77 met at least 30, 42 met at least 33, and 5 met all 36 of the criteria. Ninety-three districts met fewer than 24 criteria, and 8 districts met 6 or fewer of the criteria. The number of districts falling within each of the criteria intervals consisted of 32 districts meeting 24 to 26 of the criteria, 31 districts meeting 27 to 29, 35 districts meeting 30 to 32, 37 districts meeting 33 to 35, and 5 districts meeting all 36 of the criteria.

When the district's 2004-05 performance data were compared against the performance benchmarks scheduled to take effect in 2007-08, the number of successful districts dropped significantly. Only 26 districts met at least 24 of the 36 criteria and only 1 district met all 36 of the criteria. The number of districts falling within each of the criteria intervals consisted of 11 districts meeting 24 to 26 of the criteria, 7 districts meeting 27 to 29 of the criteria, 4 districts meeting 30 to 32 of the criteria, and 3 districts meeting 33 to 35 of the criteria. One district met all 36 criteria. A total of 207 districts met fewer than 24 of the criteria and 38 districts met 6 or fewer of the criteria.

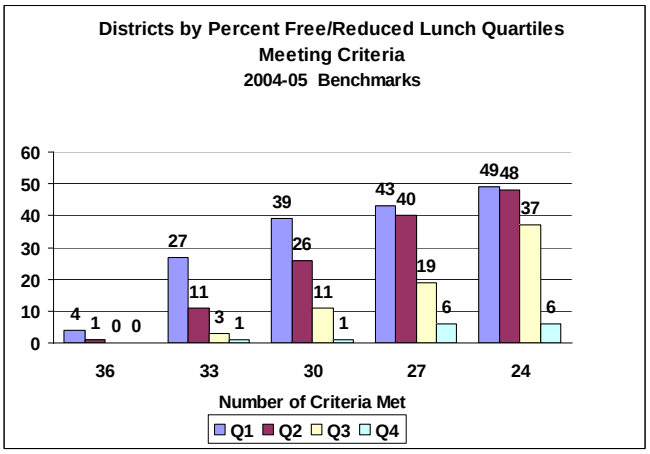
Performance on Benchmarks
Number of Districts



When districts were disaggregated by poverty and locale, the data show that districts with lower poverty levels serving non-urban populations were more successful in meeting the selection criteria. This is consistent with the results of other successful district studies - that the districts found to be successful tend to be homogeneous, wealthier, and generally suburban in character.

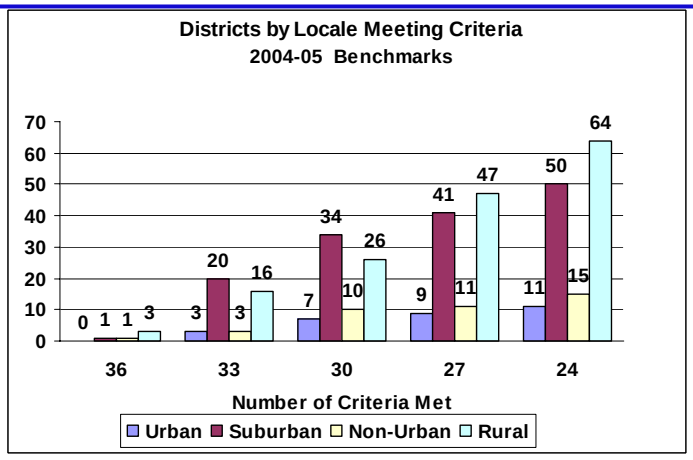
Using the 2004-05 performance goals, only six (12%) of the districts in the highest poverty quartile met 24 or more of the criteria. In contrast, 49 (92%) of the districts in the lowest poverty quartile met 24 or more of the criteria.

Performance on 2004-05 Benchmarks
Districts by Poverty Quartiles

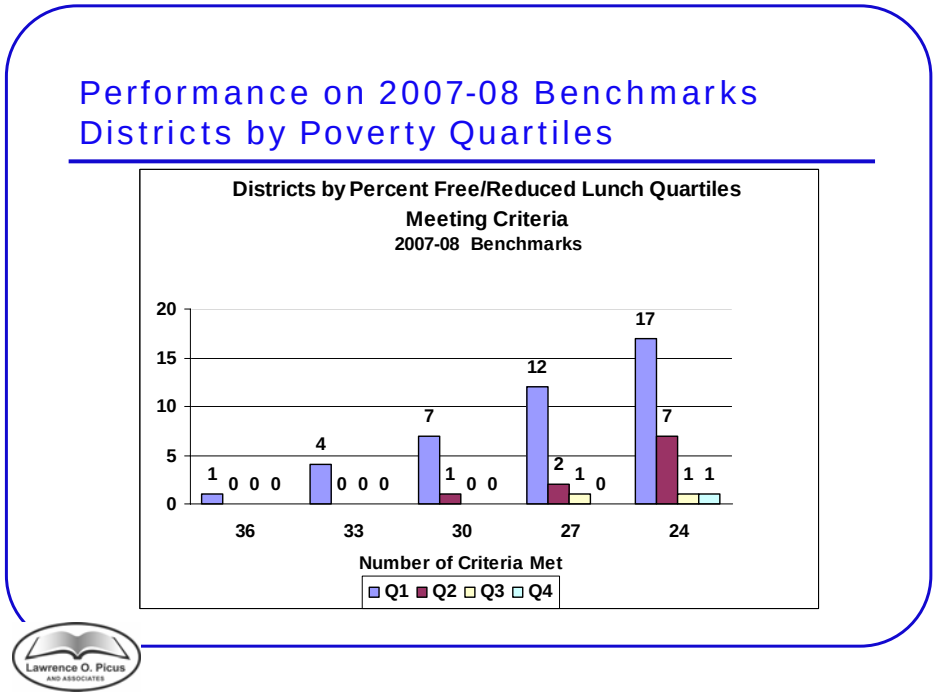


When broken out by locale, nearly 70 percent of suburban/urban fringe districts met at least 24 of the criteria. Fifty-two percent of urban, 55 percent of non-urban city/town and 57 percent of rural districts met 24 or more of the criteria. No urban districts met all 36 of the criteria.

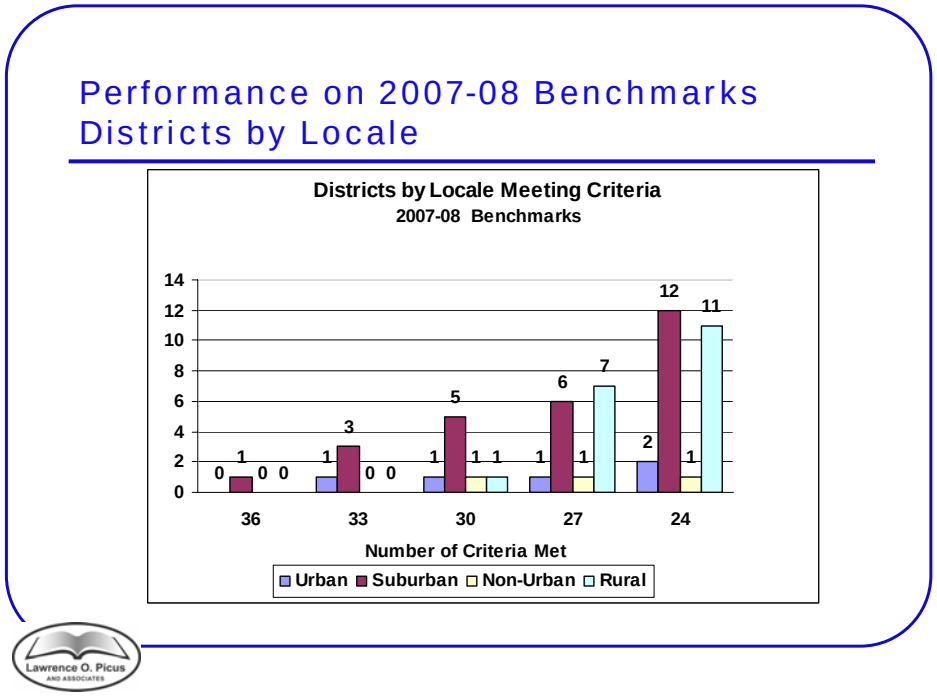
Performance on 2004-05 Benchmarks
Districts by Locale



When the 2007-08 performance goals were applied only two districts in the lowest two poverty quartiles met at least 24 of the criteria and none of these districts met 30 or more. In contrast, 17 (32%) of the districts in the lowest poverty quartile met 24 or more criteria.



Twenty-four percent of suburban/urban fringe districts met at least 24 of the 2007-08 criteria. Further, a suburban/urban fringe district was the only district to meet all 36 of these criteria. In contrast, only two of the 21 urban districts met 24 or more of the 2007-08 criteria and none met more than 30. Only one non-urban district and 11 (10%) rural districts met at least 24 of the 2007-08 criteria.



District Spending

The results of the fiscal analysis show that, in general, the higher performing districts (those that met the greatest number of criteria) spent somewhat more than other districts.

Average District Per Pupil Spending by Performance on 2004-05 Benchmarks

Criteria Met:	36	33	30	27	24	State Ave.
Regular Instruction	$5,754	$5,430	$5,378	$5,389	$5,381	$5,422
Categorical	$1,125	$1,300	$1,327	$1,329	$1,332	$1,429
Total State and Local	$6,879	$6,730	$6,705	$6,718	$6,713	$6,851
Federal	$292	$319	$366	$374	$392	$503
Total	$7,171	$7,049	$7,071	$7,092	$7,105	$7,354

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Spending on regular instruction. The statewide average per FTE pupil spending for regular instruction programs from state and local sources was $5,422. Using the 2004-05 benchmarks, spending for regular instruction ranged from $5,381 per FTE pupil for districts meeting 24 criteria, to $5,754 for the five districts meeting all 36 of the criteria.

Districts meeting 24 or more of the criteria generally spent less than the state-wide average for regular instruction. Only the five districts meeting all 36 criteria spent more than the state average. This may be due to the fact that the districts meeting fewer than 24 criteria likely had higher concentrations of high-need students. As a result their spending may have been somewhat higher than the average district.

Categorical and Federal program spending. Unlike spending for regular instruction, districts meeting fewer criteria spent more in these two categories. This may be explained by the fact that categorical and federal spending is typically targeted toward students with special needs, such as students with disabilities or limited English proficiency, or from disadvantaged backgrounds. These students typically have lower achievement levels even though they benefit from additional programmatic spending.

Under the 2004-05 performance benchmarks, all of the districts meeting 24 or more of the criteria spent less than the state averages for categorical and federal expenditures. Categorical spending ranged from $1,125 per FTE pupil for the districts meeting all 36 of the criteria to $1,332 per FTE pupil for districts meeting at least 24 criteria. The statewide average was $1,429. The range for federal program expenditures was $292 per FTE pupil for districts meeting 36 criteria to $392 per FTE pupil for districts meeting at least 24 of the criteria. The state average was $503 per FTE pupil.

This again suggests that the higher performing districts tended to serve fewer high-need students than is the norm in the state.

Total district expenditures. Total district expenditures consisted of spending for regular instruction, categorical programs and federal programs. Using the 2004-05 benchmarks, none of the districts meeting at least 24 of the benchmarks spent above the state average of $7,354 per FTE pupil. Spending by these districts ranged from $7,049 to $7,171.

In general, the higher performing districts had somewhat higher expenditures for the regular instruction program while the lower performing districts had higher expenditures for categorical and federal programs. The result was little variation in total spending among districts. However, it should be noted that overall there was relatively little variation in spending among districts. The range of total per FTE pupil spending among districts meeting 24 to 36 of the criteria was only $122.

Disaggregation by district characteristics. Somewhat greater variation was found when the results were disaggregated by poverty and locale. Generally, districts with higher concentrations of poverty and in urban or rural locales tended to spend somewhat more than other districts. When the 2004-05 performance benchmarks were used, districts in the highest poverty quartile spent a minimum of $1,086 per FTE pupil more on the regular instruction program than districts in the lowest poverty quartile. However, this finding may have questionable reliability given that very few districts in the higher poverty quartiles met 24 or more criteria. Districts in urban and rural locales tended to spend more than suburban and non-urban districts. However, the variation was slight and spending did not differ significantly from the state average.

When total spending was examined, variation by locale was still small but was somewhat greater when disaggregated by poverty. The districts in the top poverty quartile spent between $8,675 and $11,439 per FTE pupil. Districts in the lowest poverty quartile spent between $6,933 and $7,088 per FTE pupil. However, the reliability of these numbers may again be suspect given the small number of districts (6) in the highest poverty quartile that met at least 24 of the criteria.

Results using 2007-08 benchmarks. The results were similar when examining district performance against the 2007-08 benchmarks. In general, the highest performing districts tended to spend the most. However, the variation among districts increased somewhat in this analysis, with a range in total expenditures of $299 per FTE pupil. In contrast to the average for districts meeting the 2004-05 benchmarks, spending on the regular instruction program by districts meeting at least 24 of the 2007-08 criteria tended to exceed the state average. Total spending, however, was still at or below the state average.

Average District Spending by Performance on 2007-08 Benchmarks

Criteria Met:	36*	33	30	27	24
Regular Instruction	$6,133	$5,546	$5,532	$5,558	$5,474
Categorical	$992	$1,326	$1,284	$1,296	$1,281
Total State and Local	$7,125	$6,872	$6,816	$6,854	$6,755
Federal	$224	$271	$276	$280	$295
Total	$7,348	$7,143	$7,092	$7,134	$7,049

*1 District (Numbers in red exceed state average)

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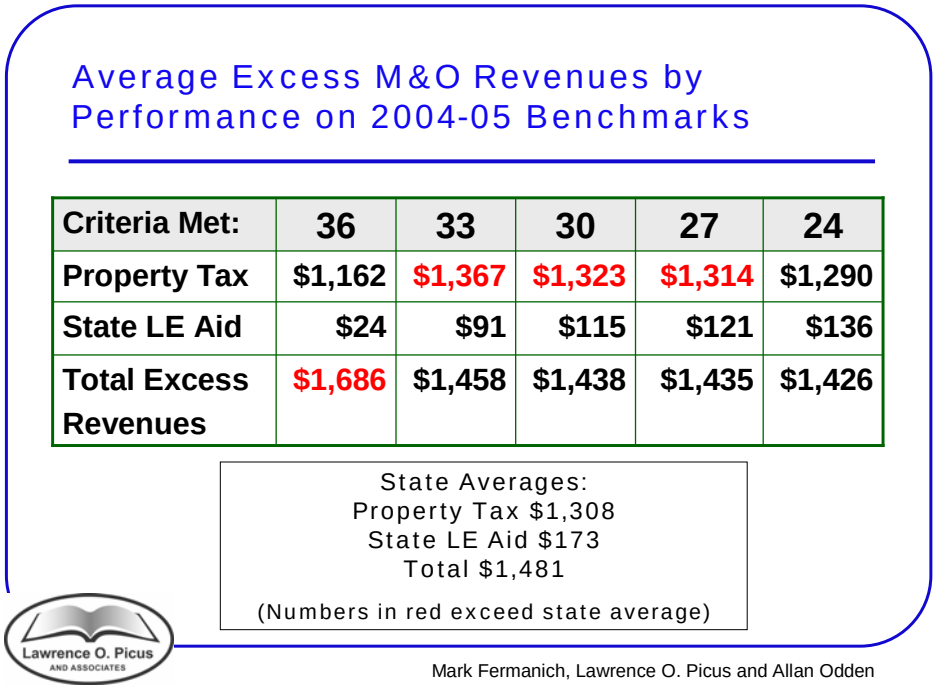
Local Levy

On average, the state's districts raised $1,308 per FTE pupil in voter approved local property taxes. The state provided an additional $173 per FTE pupil in Local Effort Assistance aid, for a total of $1,481 per FTE pupil. Under the 2004-05 performance benchmarks, the districts meeting 24 or more of the performance criteria raised slightly less local levy revenue than the state average. Only the five districts meeting all 36 criteria, with an average of $1,686, raised more than the state average. Districts meeting a greater number of the criteria tended to raise a greater share of the revenue through the local levy and less through state Assistance aid. This suggests that the higher performing districts possessed higher property wealth than lower performing districts.



The results differ when districts are evaluated against the 2007-08 performance benchmarks. The districts meeting at least 24 of the 2007-08 criteria all exceeded the state average - by up to $395 per FTE pupil. These districts also received little or no state Assistance aid, suggesting they possessed relatively high property wealth. Only the districts meeting 24 of the criteria received a significant amount of Assistance aid ($63 per FTE pupil).

Average Excess M&O Revenues by Performance on 2007-08 Benchmarks

Criteria Met:	36*	33	30	27	24
Property Tax	$1,876	$1,600	$1,542	$1,545	$1,435
State LE Aid	$0	$0	$3	$10	$63
Total Excess Revenues	$1,876	$1,600	$1,545	$1,555	$1,498

***1 District (Numbers in red exceed state average)**

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CONCLUSIONS

- Washington's school districts face significant challenges in meeting current and future performance standards. This analysis found that only five districts met all 36 of the 2004-05 performance benchmarks and only a quarter met more than 30 out of the 36 criteria. Districts fare less well when compared against the benchmarks that will become effective in 2007-08. Under these standards only one district met all 36 criteria and fewer than 10% of districts met 25 or more of the criteria.

- Higher performing districts tended to have lower poverty and be suburban or more homogenously rural. No urban districts or districts from the top two poverty quartiles met all 36 criteria for 2004-05 and only one of these districts met at least 30 of the criteria. Using the 2007-08 benchmarks, only two districts from the top two poverty quartiles met at least 27 of the criteria and only two urban districts met at least 24 of the criteria.

- There was little variation in spending among districts, indicating a finance system that may provide equity in per pupil spending, but may not be equitable across districts with differing concentrations of students with special needs.

- Depending on the benchmarks used and the number of criteria met, per pupil spending for regular instruction averaged about $5,600 and ranged from $5,400-$6,100.
    - Categorical program expenditures ranged from $1,100 to $1,300

  - Federal program expenditures ranged from $225 to $390
  - Total state, local and Federal spending ranged from $7,000 to $7,300

- The highest performing districts tended to spend slightly more per pupil than other districts. These districts also spent somewhat more for regular instruction and less for categorical and federal programs than lower performing districts.

- The highest performing districts also tended to have somewhat higher property tax revenues – about $200-$300 per FTE pupil more. These districts also received less in state Local Effort Assistance aid than average, suggesting that they have higher than average property wealth.

- Higher poverty districts spent more per pupil than lower poverty districts regardless of performance level.

- Urban and rural districts spent more per pupil than suburban districts.

2. Synthesis of the Instructional Improvement and Resource Use Practices in Selected Successful Districts and Schools in Washington

INTRODUCTION

Our goal for this portion of the successful district study was to learn more about how successful districts and schools within them produced improvements in student academic achievement, and how they used and reallocated resources to help accomplish those impressive results. This section of the report identifies the methods used to select the sample and collect the data, summarizes the results in terms of the common themes of school improvement across the sites studied, synthesizes the resource use side of their instructional improvement strategies, and presents a synthesis and summary of overall findings. Case studies of each district studied are included in Appendix C.

At the request of Governor Gregoire's *Washington Learns* Committee and its K-12 Advisory Committee led by State Superintendent Terry Bergeson, Lawrence O. Picus and Associates conducted case studies of nine purposively selected districts and selected schools within them to understand the instructional improvement visions and strategies of successful schools and how resources were used to implement those visions. The study sought to understand how education dollars are used at the school and district levels for a variety of educational strategies that have improved student performance. Results are intended to inform the ongoing school finance adequacy study, which proposes a set of school-based resources needed to double student performance and to inform other districts and schools in the state that are planning and implementing teaching and learning improvement processes also designed to improve student performance by large amounts.

A series of case studies of districts and selected elementary, middle and high schools, revealed many common strategies for improving instruction that resulted in impressive gains in student performance. Some of the schools studied doubled and tripled their scores on the Washington Assessment of Student Learning (WASL). Most of the schools' students performed above predicted levels in relation to student demographics. The success and steady progress of students turned out to be the starting point of each district's improvement process. Administrators and teachers studied overall trends in performance as well as disaggregated data for subgroups of students. They recognized and celebrated their successes in addition to identifying and taking responsibility for poor performance.

Instead of teaching more of the same content, staff reviewed more effective curriculum and adopted new research-based curriculum programs that were aligned with state content standards. This addressed the shortcomings they had found in their previous curricula and focused them on tying their lessons to corresponding Grade Level Expectations (GLEs). Many districts and schools adopted problem-based curricula with lessons focused on higher order thinking skills. Others adopted comprehensive school

reform curricula. Most important was that the curricula were research-based and the teachers received training to implement it.

With a clear vision of the content in hand, they improved instructional practice based on data and supported by professional development. Teachers received training in the content of the curricula and related research-based instructional strategies. Many of the schools drastically restructured what their school day looked like by creating multiage classrooms, providing double periods of core content, and adding a common planning period for teachers (to enhance collaborative work to improve instruction). Administrators provided time and substitutes for teachers to observe each other's classrooms and work with each other on lessons. Many districts also implemented district-wide pacing schedules that held teachers accountable for covering all the material in the curriculum and aided students who moved among the schools in the district. Instructional leaders supported improvements in teaching through observation and feedback that were not tied to performance reviews.

Professional development was an essential element in these districts' success. They took at least one year to create a plan that would support teachers in improving their practice. This year of study included building professional relationships, creating a shared instructional vision for all students, researching and adopting new curricula as well as aligning curricula to state standards, participating in professional development that focused on content and instructional practices, and building capacity for teacher and administrator leadership. For many districts, teachers were paid for additional days during the summer for parts of the new professional development. Many other districts put literacy and math coaches into schools; many of these coaches were part-time because of lack of funding even though the districts desired to make them full time.

Teachers committed to ongoing data-driven decision making by administering frequent formative assessments and adjusting their instruction accordingly. The elementary teachers utilized continuous ability grouping, especially in reading, in which students were frequently assessed and moved freely among groups. This was also a strategy in which student performance was reviewed often and struggling students quickly identified.

Struggling students received extended learning opportunities. These were not uniform across the districts, but all districts worked to provide additional help concentrated on the core curriculum. Some schools offered before and after school time with teachers focused on the curriculum. Others provided double periods of core classes. Many of the schools offered WASL preparation. Most of the elementary schools set up literacy and math blocks for uninterrupted instruction and reduced class sizes. Almost all of the elementary schools provided more kindergarten than is provided by state funds. Summer school was also offered to struggling students. A few districts and schools provided tutoring, which was seen as the most effective but also the most expensive strategy – too expensive for most schools.

Findings from this study revealed that these successful districts made it a priority to focus all available resources on improving teaching and learning. Schools and districts employed reallocation of staff and scheduling redesign to provide for teacher collaboration, class size reduction, and extended learning opportunities. By focusing all

of their resources towards improving teaching and learning, these districts were able to make significant and steady progress. To maintain these efforts and expand them to all content areas and grade levels, they will need additional resources from the state. Many had significant starter grants to begin their improvement process.

METHODOLOGY

Sample Selection

Since the intention of this study was to understand systemic educational reform, we developed a framework to identify successful districts and successful schools within those districts rather than simply identify isolated successful schools throughout the state. We chose to use a purposive, non-random, sample because the goal of the study was to identify successful districts and schools and understand how they achieved that success and how they were able to use the resources available to them to help them improve student learning. We used a four step process to identify the sample of districts and schools that were included in our sample. In short the process worked as follows:

1. The *Washington Learns* K-12 Advisory Committee nominated ten districts they believed had drastically improved their students' performance over the last several years. Washington Office of the Superintendent of Public Instruction (OSPI) employees also submitted ten districts for consideration based on their belief of recent success. In some instances the same districts were identified by both groups.

2. The data from the successful district analysis – described in section 1 above – were used to identify the performance of all school districts, and the results compared to the lists generated in step one.

3. Districts that were identified by Washington officials and met the performance criteria from the successful district study were retained. The performance of the remaining districts were then checked against districts with similar demographics, and kept only if they had made significant gains compared to those comparison districts. Two districts were added to the list that had beaten the odds with student performance gains compared to districts with similar student demographics.

4. Finally, schools within the selected districts were chosen based on an analysis of WASL performance, high school graduation rates and achievement gap statistics, cross referenced with poverty quartiles, total enrollment and school level range.

This process provided us with a diverse sample of successful districts and successful schools within those districts. Appendix B provides further details of our methodology

Data Collection

Instrumentation

Our goal was to collect information on the instructional vision and corresponding deployment of resources in the sample districts and schools. Two categories of interview protocols were developed: one was designed to collect data on school-level staffing resources and district-level professional development resources; and the second category of protocols was designed to glean the instructional vision and improvement strategies that resulted in increased student performance.

The resource use protocols were derived from our previous work in developing a research-based, school expenditure structure and corresponding resource indicators. This structure and related indicators were first introduced in the winter 2003 issue of the *Journal of Education Finance* (Odden, Archibald, Fermanich, & Gross, 2003, p. 330), and have been field tested in five states across the country. The protocol used in this study relied on this previous fieldwork and was complemented by input from Washington educators so it could be tailored to the specific context of resource allocation and use in Washington. Each data item to be collected from districts and schools was defined in a data collection codebook that was utilized by each of our field researchers. The categories of data collected include:

- School Resource Indicators: student demographics, length of core classes, and AYP status
- Full Time Equivalents (FTEs) for teacher and staff positions in each school: core teachers, specialist and elective teachers, library staff, extra help teachers and aides, other instructional staff, alternative program staff, administrators, pupil support staff, instructional facilitators, professional development administrators, permanent building substitutes, secretaries and clerical staff, and non-teaching aides.
- Professional development budget amounts for each school and for the district as a whole.
- Daily rates for substitute teachers and any dollars budgeted for non-professional development consultants.
- Class sizes for elementary schools.
- Test scores for students in each school.

The second category of data collection protocols consisted of an interview guide that included open-ended questions focused on capturing each school and district's instructional vision and how that vision was implemented. The categories of data collected include:

- Curriculum and Instruction: content focus, curriculum used, instructional methods, assessment, instructional vision and implementation.
- Resources: early childhood programs, full day kindergarten, class size reduction, professional development, interventions for struggling students (tutoring, extended day, summer school, ELL, and scheduling), parent outreach or community involvement, and technology.

- Nature of the improvement effort (e.g. centrally driven, bottom-up)
- Instructional Leadership
- Accountability

Field Training

A one-day training session was conducted for the four data collectors, all of whom had experience with previous iterations of the protocol. Each data collector was assigned ten "sites" (schools and districts), with one person assigned to each district and the corresponding schools within the district for consistency. Principals and superintendents were provided with budget item requests ahead of time, and asked to provide a staffing list from which to work during the interviews. In-person interviews were conducted with each principal to collect school-level data items; and with each superintendent to collect the district-level data items. In addition, test scores were collected from the As-Is website for each school and district. Follow-up emails and phone calls were made to collect any remaining data items.

Data entry was coordinated through an online database where each data collector entered the resource data they had collected into pre-determined fields. Answers to open-ended questions were also entered into text fields in the online database. Data collectors took copies of documents and records also provided during their visits to each school and district. Data from the database was then downloaded and cleaned by one data analyst. After cleaning the data, queries were written to analyze the quantitative data and themes were gleaned from the qualitative data.

RESULTS[1]

Data analysis revealed that the successful districts and corresponding schools studied were able to raise student performance by focusing all of their resources toward improving teaching and learning. The results reveal that many of the districts used startup grants to begin their improvement processes, reallocated resources to the degree possible, but then needed additional funds to continue and expand their efforts. The stories captured from these educators reveal that there are several common and key elements to successful systemic reform, and that those elements require significant resources. Following is a description of the demographics of the schools, an integrated look at the themes that emerged from the school and district reform strategies, a breakdown of the resources utilized to achieve those improvements, and recommendations for how these findings can inform Washington Learns' recommendations for resources and support to other Washington districts looking to improve teaching and learning in their own schools.

[1] Case studies of each district are included in Appendix C.

Demographics

The final sample included nine districts, and within those districts, 31 schools including: one PK-12 school, 17 elementary, seven middle, and six high schools. Most elementary schools were kindergarten through fifth grades, but the range went up to eighth grade. Almost all middle schools served sixth through eight grades, and almost all high schools served ninth through twelfth grades. 20,365 students attend these 31 schools with the average enrollment per school at 657 students, and a range of approximately 200 to 1,800 students. An average of 33 percent of students receive free and reduced price lunch, with a range of zero to 86 percent among all the schools; this compares to a state average of 36 percent. An average of 12 percent of students have individualized education programs (IEPs), with about half of the schools serving their special education students in a mainstreamed environment; this compares to a state average of 12.3 percent. An average of eight percent of students are identified as English Language Learners (ELL) in these schools, with a range of zero to 40 percent; this compares to a state average of 7.1 percent. All but one middle school and two of the high schools met conditions for Adequate Yearly Progress (AYP) this school year.

Student Performance

Several of the schools in the study doubled and even tripled their students' scores on the WASL. Other schools produced learning gains above levels predicted for their student demographics. One school even achieved 100 percent of fourth and tenth grade students meeting WASL reading proficiency. These steady gains were accomplished within the last five years and continue to grow as the schools expand reform efforts to more content areas and grade levels.

Key School Improvement Elements of Successful Districts

After capturing and analyzing the forty accounts of what it takes to improve teaching and learning, several themes emerged to form the core elements of successful systemic reform. These elements are:

1. Focus on Educating *all* Students
2. Use Data to Drive Decisions
3. Adopt a Rigorous Curriculum & Align to State Standards
4. Support Instructional Improvement with Effective Professional Development
5. Restructure the Learning Environment
6. Provide Struggling Students with Extended Learning Opportunities

1. Focus on educating all students.

Each district grounded their reform efforts in educating *all* students to state standards. The principle of high expectations for all students was at the core of their curricular and instructional decisions. Teachers held themselves responsible for *all*

students' learning, not just those in their own classes. Mission and vision statements specifically stated a commitment to educating *all* students. For example, District B, comprised of students who overall had tested well in the past, set a new goal to advance all students, not only those who were struggling but also those who already had reached relatively high levels off academic achievement. District D's mission is to "Ensure the success of all students," which is defined as all students graduate for high school prepared for college, work and citizenship. District F staff developed the following instructional vision: "Partner with parents, provide a safe learning environment, educate all students, and empower them to make correct choices." Further, principals in District G reported hiring people who shared their vision that all children can learn to the best of their ability. This may seem to be a commonly held belief in all K-12 schools, but often teachers gear their instruction towards the average student, and those above and below are lost in the mix with no one being held accountable for their failure to learn. Several of the districts received Gates grants, and correspondingly focused their instructional vision on "rigor, relevance, and relationships." This vision advocates for rigor and relevance of classes and relationships building between adults and students in the school. With a philosophical foundation grounded in high expectations for all students, districts and schools then geared their curriculum and instruction towards all types of students.

2. Use data to drive decisions.

With a shared goal in mind, every successful district used data to drive decisions about curriculum, instruction and use of resources. They began by looking at their student data. District E insists that all decisions be informed by data and research. To that end, the district has brought in a consultant to train principals and central administration on a decision process that involves continuous assessment and feedback. Each year the district administers benchmark assessments in math, reading, and writing in the sixth and eighth grades. In addition, teachers use classroom-based assessments in social studies. Teachers not only receive feedback from the formative assessments but schools also receive analysis of their students' WASL performance in reports prepared by a consulting firm hired by the district. This achievement data, combined with results from the climate survey, form the basis of information used by the school to develop its annual improvement and action plan.

School staff in District F started by analyzing WASL scores, established a baseline and used it as a reference point to make further progress. For the first few years, they focused on broad areas, and now they analyze the data by strands (e.g. student, class). From the test score data, they set goals in math, reading, and writing.

District G administrators' monitored implementation of a district curriculum by collecting data from schools after each unit was taught. They also conducted walk-throughs where they would look for: "Content relevant and connected to real life, context in which evaluated, cognitive level of demand, and engagement." Principal meetings were organized as professional development time during which they examined curriculum alignment and data. The district testing and evaluation team takes on a large portion of the data analysis work so that principals can concentrate on implementing strategies based on the data. At the school level in District G, staff analyze student work

and test data to focus professional development and determine which classrooms get Title I dollars. Ongoing formative data every six weeks occurs in the primary grade and that is how students are placed in reading groups. They utilize an assessment wall, and every grade level collects data on every student four times a year in reading and writing. This assessment data determines how resources are allocated.

In District H, after the assessments are administered, a team of teachers reviews the assessment by identifying the key skills and mastery tested, reviewing the scoring rubrics, and scoring the assessments. Results are returned immediately through scanning systems. The group then analyzes the data, identifies trends and gaps in performance, identifies students for targeted intervention, and makes plans for the next instructional period. Assessment results are also integrated into professional development.

Results showed that most of the staff had looked at the overall scores, but once they disaggregated performance data into subgroups of students, and even further into specific content subcategories, recognition of holes in instruction and struggling students began to emerge. Several elementary schools created data charts on which every student in the school was monitored. Schools and districts created teams to address curriculum gaps. Districts then focused professional development on improving instruction in targeted areas. Data drove instruction. Teachers differentiated instruction based on the formative assessments they developed as well as the summative assessments given district- and state-wide. They created continuous assessment and feedback loops in order to quickly identify struggling students and get them the targeted help they needed.

3. Adopt a rigorous curriculum and align to state standards

With the knowledge gleaned from the formative and summative assessments, districts and schools made it a priority to select curricula aligned to state standards. District A developed curriculum that is aligned across K-12 and completed backward curriculum mapping to increase students taking Advanced Placement and International Baccalaureate classes. The district developed aligned curriculum, first for reading, then for math, followed by curriculum for the other academic disciplines (e.g. science and social studies). In addition to in-house curriculum development, the district purchased several research-based curriculum packages, such as *Math Investigations*. Once the curriculum was established, district curriculum coaches in all disciplines worked, and continue to work, directly with school staff to ensure appropriate implementation of the curriculum. Recently, the district developed a web site in which all content-based lessons and units are available to all school staff.

District B identified needs based on achievement test scores and used state standards as a basis for district curriculum decisions aligning with these standards. With the financial help of a community-based foundation, several curriculum packages were purchased, including *Chicago Math* for the high school level and the *Houghton-Mifflin Literacy Program* for K-8. The total amount spent was $600,000, some of which was from district funds and a large portion from foundation funds. Additionally, the district funded and implemented *Discovery Math Investigations* for students in K-5 across the district. Over the past several years, the district has formulated standards for math and some for literacy. They are currently working on writing standards and have future plans to focus on science.

District C by adopted high quality instructional materials aligned with state standards. All materials adopted district wide go through an extensive review process to ensure that they are aligned with the state's Essential Academic Learning Requirements (EALRs) and Grade Level Expectations (GLEs). The textbooks adopted by the district support its view of good teaching, which embodies engaged students involved in active learning. Texts adopted by the district emphasize project-based learning where students construct meaning and develop their problem-solving skills. For example, the district adopted the Foss and STC science curricula for elementary grades this year, both of which are very hands-on and aligned with state and national science standards.

District D focused instructional improvement on literacy. A $100,000 grant from the state and the Gates grant helped to propel literacy work forward. They focused on an inquiry- and projected-based approach with assessment tools to match. They aligned their curriculum and instruction with state content standards, the EALRs and the corresponding GLEs.

Central office administrators in District E explained that alignment of the "written, taught, and tested curriculum" with the state standards was central to the work of their schools. The district has embarked on system-wide curriculum "calendaring" to sequence the curriculum and provide a curriculum guide for all teachers. While the district has largely resisted requiring specific instructional programs and texts, they have recommended that elementary programs use *Everyday Math* and have recently required that all elementary programs use a common science package. The high school, with the support of the Gates grant, engaged in a school-wide curriculum review and developed a common instructional model to be used across the school. Finally, the district developed formative assessments that aligned to the district's curriculum and standards.

District F created a district elementary curriculum guide with time constraints because of high mobility rates. The curriculum was aligned with state content standards, the EALRs, and the corresponding GLEs. The school board adopted the policy that expects district curriculum to be taught.

To support reading and mathematics instruction, District I purchased new, research-based curriculum and implemented extended learning time for both subjects. In reading, *Houghton Mifflin* was adopted as the core curriculum for grades K-6 while *High Point* is used for interventions in grades 6-12. The mathematics curriculum consists of *Integrated Math* at the elementary level, the National Science Foundation developed *Connected Math* for middle schools, and *SIMMS Integrated Math* for the high schools. All are research-based and designed to promote higher order thinking skills and problem solving skills. To upgrade science instruction, the district recently adopted *FOSS (Full Option Science System)* Science Kits for the elementary and middle schools. This curriculum also encourages hands-on, problem-based learning where students learn science by doing science. McGraw Hill's *Interactions Science* was also adopted for interventions with struggling students, although this hands-on physical science curriculum has become so popular that it is increasingly being used with all students.

The curricula that districts and schools implemented were mainly problem-based and comprehensive school reform curricula. The most important aspects were that the curricula be tied to the state standards and the corresponding instructional methods are research-based. Higher order thinking skills were stressed. This was a key element of

their improvement process because it not only got them to study the content, but in the process they became more familiar with the state standards and grade level expectations. They also aligned their curricula across content areas and grade levels to provide students with seamless curricula.

4. Support instructional improvement with effective professional development.

With the support of the aforementioned elements of change, implementation of the instructional vision and strategies can succeed. The jumping off point for implementation was to have a goal in mind, specifically student learning targets. In other words, instruction was shaped by K-12 student outcomes. Once the curriculum was established District A assigned curriculum coaches to schools; these coaches continue to work, directly with school staff in all disciplines to ensure appropriate implementation of the curriculum. Most of the coaches were part time, however.

District B teachers and other instructional staff have attended training on the curriculum models, processes for implementation, assessment tools used in the models, and instructional strategies useful with the various curricular programs. Some of the more experienced teachers in District B were provided training in math coaching with the goal of their working with less experienced teachers and other instructional staff. An essential element to continuous instructional improvement is the early release day every Monday when students leave school one and one-half hours early on that day giving teachers time for planning and professional development. Of the average four Mondays in a month, one is devoted to district-led staff development. Teachers most frequently, but at times the school principal, will determine how the other monthly Monday release times are spent.

Much of this professional development in District C is focused on the content areas of reading and mathematics and the district vision of effective teaching that engages students in problem-based and project-based instruction. The district supports teacher engagement in professional development by providing for training opportunities from both internal and external trainers and consultants, by providing teachers additional time for training, and by funding district coaches and school-based teacher mentors. The district funds two full-time coaches to work with elementary teachers on improving literacy instruction and one full-time coach for improving instruction for English language learners. Although the district feels that a staffing strategy of one full-time coach each for literacy, mathematics and science per school would be more effective, looming budget cuts for the 2006-07 school year makes an increase in the approximately $210,000 coaching budget unlikely.

The elementary schools in District D began by focusing on adult learning based on the belief that what really matters is the instructional practice of a quality teacher in every classroom. They studied and developed beliefs around the fact that all students can learn, recognized it as their responsibility to get the students there, and refused to make excuses for their students or themselves. Staff developed a clear focus for what students need to learn, guided by the Grade Level Expectations (GLEs). Students are put on a chart if they are not up to grade level and the student's names can move if they improve; if taken off chart, they celebrate. Time for teachers was blocked for collaboration; Good partnerships can move teaching techniques and they decided to create blocks of time for

instruction and for preparation. Staff developed strategies for in-depth comprehension, attended summer institutes as grade level groups, attended "Critical Friends" training to help develop professional learning communities, instituted peer observation and videotaping of lessons, created book studies, and worked with district-level consultants.

The middle school in District D started improving instruction with people ready to change and built a critical mass. Together they set three school-level instructional initiatives: base all instruction on active learning; create performance based assessments; and differentiate instruction. Next, middle school staff's reading task force wrote a literacy guide with the help of a consultant from the Center for Educational Leadership, University of Washington. Then they aligned assessments with state standards and benchmarks. Staff received training in and implemented differentiated instruction in their classrooms. They also committed to teaching 90 minute classes in math and reading every day. Teachers are supported by an instructional literacy coach, and five sessions with a math coach. Hopefully, they will have their literacy consultant for one more year and plan to have master teachers continue it.

Instructional improvement takes an enormous amount of professional development. One of the budgetary decisions that District F staff made was to make professional development a priority by making resources for training one of the highest district priorities. They cut back on maintenance, food service, and secretarial staffing to fund ongoing professional development at a high level. They attend workshops, work together to become familiar with the WASL, schedule time together to work on how they can improve in targeted content areas, and build teacher leaders. The state pays for two Learning Improvement Days (LID) per teacher per year, but since District F is a small district they cannot afford additional days. (Larger district have additional days paid by local levy dollars.) The LID days take place before school starts and are led by school and district administration. The district does provide teachers with one and a half hour early release days every other week. Informally, teachers constantly collaborate. They would like and could use more professional development days.

School-based reading and math coaches are funded by District I to support schools in mastering the new hands-on curricula and in analyzing data for guiding instructional improvement. Elementary schools are each assigned a full-time reading coach and half-time math coach, while secondary schools are generally provided a full-time reading coach and a 0.3 math coach. Overall, the district invested over $2.2 million in 32 FTE school-based coaches. Nearly all of the funding for these coaches comes from categorical dollars, including federal Reading First and Title II, and state I-728 funding. While district officials feel that greater gains could be realized if schools had full-time math coaches as well, there is no additional funding available. At least one of the elementary schools has elected to use its own discretionary funds to pay for a full-time math coach.

All of these strategies for instructional improvement require intensive professional development to ensure effective implementation. In addition to the cost of the reading and math coaches, District I spent nearly $2.5 million on professional development activities in 2005, including nearly $1 million for stipends and substitutes to provide teachers with additional time for training, and another $1 million for internal and external trainers and consultants. Much of this spending was focused on the priority

topics of literacy, mathematics, professional collaboration, and data use. District I also provides substantial student-free time, including 14 days during the teacher contract year and early release time every Monday afternoon. However, under the terms of the teacher contract the majority of this time is controlled by individual teachers and may be used for purposes other than professional development, such as classroom setup or teardown, grading papers, or parent conferences. The district also provides 2-3 days of training prior to the start of the school year for academies for teachers new to the district. These academies focus on the district's math and reading programs and using data to guide instruction.

A key element of systemic reform in these districts was quality professional development focused on rigorous curricula and research-based instructional strategies. As mentioned above, an important ingredient to success is collaborative planning time for teachers. This approach to professional development is especially effective because it is embedded in the curriculum and applicable to the teacher's instruction in their own classrooms. Further, though not all schools could afford the support, many successful schools utilized instructional coaches in literacy and math. These coaches were viewed as an invaluable resource, and even the schools that could afford them identified the need for more in additional content areas and grade levels. Many of the districts adopted new curriculum, so a large portion of their professional development was dedicated to learning the content and instructional strategies necessary for successful implementation.

5. Restructure the learning environment.

The Districts and schools in this study developed small learning communities for students and created multiage classrooms where necessary. In addition, many schools employ continuous ability grouping which is fed by frequent assessment and feedback loops. District A offers seven classes per day, which means a longer school day for students and staff, funded primarily by levy monies. District A also provides reduced class sizes for its Title I schools.

District B provides side-by-side math classes for middle and high school students needing extra help. These classes entail pre-teaching (i.e. a preview of upcoming math to be offered), reviewing lessons, and/or filling a knowledge gap. Students take the class back-to-back with their other math class, hence the title "side-by-side." Implementing these classes required one additional certified teacher FTE for every 1,100 students in the school.

One of District C's middle schools provides another example of innovative improvement strategies. This school organizes itself into houses of 75-100 students and sets aside two two-and-a-half hour blocks of uninterrupted instructional time in the core subjects each day. This schedule also provides each house's teaching team an hour of collaborative planning time per day. Staffing multiple houses of this size is made possible by the school's use of state I-728 funds to hire an additional 2.5 full-time teachers. District C also funds an additional 12-15 teacher positions for class size reduction in grades K-4. These additional staff provide one additional full-time teacher per elementary school, plus up to one additional full-time teacher in elementary schools with a high proportion of at-risk students.

An elementary school in District G initiated a school wide discipline plan. The idea was to get behavior under control so they could focus more on teaching and learning. This falls in line with the Bill & Melinda Gates Foundation's Three Rs "rigor, relevance, and relationships" model in that they raised rigor after relationships were in place. The discipline plan also held teachers responsible for all kids, and placed the teacher in charge. Another elementary school in District G provides 90 minutes of uninterrupted instruction in reading and writing, and a minimum of 60 minutes per day for math instruction and practice.

District I has also increased instructional time in the core subject areas. The district requires elementary schools to set aside 90 minute reading blocks, with some of the schools with the lowest reading performance, particularly those with large English language learner populations, providing an additional 30-60 minutes of intensive reading instruction per day. Similarly, most elementary schools increased time for mathematics instruction to 70-80 minute blocks. Additionally, district wide pacing schedules were implemented for both reading and mathematics.

These structural supports are key strategies to increasing student performance. More instructional time in the core areas has been given a priority through scheduling blocks, longer schools days, and double periods. Literacy and math blocks were especially prevalent in the elementary schools as they provided not only uninterrupted time in the core content areas, but also allowed for class size reduction. At the secondary level, many of the districts also prepared their students for and encouraged them to take advanced placement classes. Even with these strategies, some students need additional and alternative instructional assistance.

6. Provide struggling students with extended learning opportunities.

Struggling students were quickly identified and provided with extended learning opportunities in nearly all districts and schools. Each district and school chose different methods for giving struggling students another dose of the content. Some schools provided students with before and after school time with teachers focused on the curriculum. Others embedded the extra help within the school day via tutoring, double periods of core classes, all-day kindergarten, early childhood programs, WASL preparation, literacy and math blocks, and a year-round schedule.

Early childhood programs were an integral part of the systemic effort in many of the districts. They identified students early and were able to catch them up by the time they entered kindergarten. District A offers a Head Start program, both full- and part-day. District C offers a Title I funded pre-kindergarten program for four year olds who are highly mobile and unprepared for kindergarten. About 24 students are served per year in two sections, each staffed with a teacher and an instructional aide. District C spends about $100,000 for the program. Even Start ($150,000), Head Start ($100,000), and federal special education preschool money funds the Birth to 5 program in District D. A center based model for "at risk" children, the mission is to support the development of healthy literate families so that all children will experience success in school. This year 16 of 40 "graduating" preschool students entering Kindergarten next year have already met all of the fall benchmarks for kindergarten. Twenty-four of 40 "graduating" preschool students entering Kindergarten next year have already met 90% of the fall

benchmarks for kindergarten. District I offers a district-wide pre-kindergarten summer academy for incoming kindergarteners who are identified as lacking in academic or social skills. The program is designed to help prepare these children for kindergarten during the upcoming fall. The program serves approximately 350-450 children annually and the classes are typically held at the school where the child will attend kindergarten. The program costs approximately $150,000 per summer and is funded largely through state I-728 funds.

Some of the elementary schools in District C have extended their half-day kindergarten programs by a few hours or by offering an all day class every other day. The schools pay for this by using their extended day dollars or state I-728 funds. District I uses various funding sources to extend all of its kindergarten classes to full day.

District A teachers tutor students during their release day time on Wednesdays or the one hour after school they remain on campus the other four days. All tutoring in the district is voluntary; however, teachers encourage those students that need additional help to stay after school. Parents in District B, a wealthy community, pay for private tutoring for their children that need assistance. In addition, District B offers drop-in tutoring sessions three nights per week, some of which is covered by Title I funds though the majority is paid for by tuition from parents. District C provides additional funding to all schools for extended learning time for struggling students. State I-728 funds are the primary source, but secondary schools also tap into federal Gear Up grant dollars. How this time is configured is left up to individual schools, but extended time is generally scheduled for before and after school, during lunch, or during the winter and spring breaks. Typically, teachers from the school, supported by aides, tutor small groups of 3-8 students using the school's standard curriculum or supplemental intervention programs aligned with state standards. Some of the tutoring during extended learning time is provided by regular classroom teachers who receive additional pay if they tutor during their prep period or before or after their contract day. Instructional aides also provide one-on-one and small group tutoring in the elementary schools. In District C secondary schools, about $750,000 in Gear Up grant funding is used to pay community college students and other community adults to do tutoring. Most of the tutoring is conducted in small groups of 3-5 students in the classroom or during elective periods rather than through pull out programs. The Gear Up tutors are monitored by classroom teachers and may receive some training in the intervention strategies with which they work. An elementary school in District G utilizes its Reading Recovery teacher to assist individual students in first grade, often removing the need for special education. Teachers also tutor small groups of students before and after school, with payment through extracurricular contracts. In District I, most staff hired specifically to support instruction through tutoring are instructional aides who have received training in the intervention programs with which they work. Regular classroom teachers provide much of the tutoring during extended learning time, receiving additional pay if they tutor during their prep period or before or after their contract day. Small group tutoring occurs both in the extended learning time programs and during the longer instructional blocks for reading and mathematics.

District A also provides funding for an after-school program for ELL students and each school. At the elementary level in District C, a pull-out model staffed by bilingual

aides is used. These aides work with students for a half hour per day, although monolingual students may receive an hour or more of services per day. At the middle school level in District C, there is a district-wide new-comers class for monolingual students that uses the *Steck-Vaughn* and *High Point* reading programs. Depending upon their level of English acquisition these students may stay in this program until they transition to high school. The District C high school offers lower-skilled students 1 or 2 blocks of ESL or sheltered English per day. It also offers a Migrant Living Skills Program that teaches study skills, homework skills, and understanding how high school works. Instructional aides in District D elementary schools are also provided to assist all ELL students, while some elementary schools also have an ELL teacher. The ELL teacher in District D's middle school serves 30 students with a "newcomers' group" at the beginning of day for 1 ½ hours if students are low on the test. The rest of day she supports teachers in classrooms, meets with teachers, and provides after school pre-teaching. At District D's high school, two part-time teachers provide services to ELL students. An elementary school in District G utilizes ELL tutors and teacher on a regular basis.

The elementary schools in District D provide second through fifth grade students three seven-week blocks of an extended day program for an hour and 15 minutes after school three days per week. At the middle school in District D, a 21st Century Grant funds an extended day program for 3 days per week, 1 ½ hours at a time, with middle school students who are not meeting standards. District D's high school offers tutorials for an hour before and after school that is supervised by a paraprofessional. Extended day help in District F includes one half hour before school and one half hour after school. During both of these times, teachers are available to help students, primarily via one-to-one tutoring. The after school program is required for students with poor grades. K-8 summer school is fairly limited to students who are at risk of regressing during the summer months. Some District I schools have altered their bell schedules to provide intervention time during the regular school day. Others have implemented extended day programs before or after school or on Saturdays. Typically, teachers from the school, supported by aides, tutor small groups of 3-8 students using the school's standard reading or mathematics curriculum or aligned intervention programs. The extended learning time may also be used for test preparation for the WASL. The extended learning time programs in District I are paid for primarily with state I-728 funds. Five elementary and the two middle schools also received three-year federal 21st Century Learning Center grants to support their extended learning programs.

Some districts provided summer school for struggling students. District A provides summer school on a sliding fee scale. District B provides summer school in math for students needing support. District C offers a five to six week summer school program that serves 350-400 students in grades K-12. The program is remedial for elementary and middle school students. These students are taught using intervention program materials aligned with state standards and the regular course curriculum. The high school program is almost exclusively for credit retrieval for students who need to make up credits for graduation. District C also offers a special summer program for migrant students to make up for course time missed while out of the district or in

anticipation of leaving the district for a period of time. This program permits these highly mobile students to earn credits necessary for graduation. District D elementary schools provide summer school for at-risk students during four weeks of a half day program. District D's high school summer school provides a fee-based credit recovery program using Novanet for 2 hours a day during four weeks. District I provides summer school programs at every school site in the district. The configuration of the programs varies slightly from school to school and from K-8 to high school. All of the summer school classrooms are staffed by certified teachers with assistance from instructional aides for small group work. Class sizes tend to be smaller than during the regular school year. The elementary summer school classrooms serve 10 students per teacher with a 0.7 instructional aide. The middle schools serve 16 students per classroom with a teacher and a 0.25 aide, while at the high school level there are 16 students for each teacher with no aide. The summer school program serves about 4,000 students per year. The cost of the 2005 summer school program was approximately $986,000.

The schools and districts in this study utilized a significant amount of resources for the benefit of their students who need additional learning opportunities. These strategies for struggling students started in a preventative way with early childhood programs and enhancing kindergarten to full-day. Student achievement was also enhanced through tutoring, before and after-school programs, programs for ELL students, and summer school. No matter when the help was provided or through what type of structure, the focus was on core curriculum content. It is also important to highlight that the struggling students are provided with a second dose of the content with an instructional environment where they receive more individualized attention.

The Importance of Instructional Leadership and Teacher Professional Community

The key elements of improving teaching and learning do not happen without support from leadership and a culture of professional community. In order to take action based on the shared instructional vision, districts built and supported instructional leadership in their administrators and teachers. This key element helped educators move from the idea to the action phase in an effective way. Administrative roles were kept to a minimum and instructional responsibilities were more prominent. For example, meetings were restructured as learning opportunities for staff instead of administrative upkeep. Time and resources were strategically dedicated to provide collaboration opportunities where staff could focus on research-based instructional strategies. Districts committed to building the capacity of their leaders, and this continuous improvement supported efforts set up a system where effective administrators who retired or left were naturally replaced with teacher leaders who had been part of the change process all along. Principals did not see their primary role as a disciplinarian or manager; instead, they aided in observing lessons and providing feedback for teachers. This was not part of a mandatory evaluation for human resources. It was instead an ongoing support for teachers as they improved their practice. Another key piece to instructional leadership was that many districts utilized a leadership team to make decisions. The leadership team is made up of representatives for all content areas and grade levels, and teacher buy-in is embedded from the beginning of the change process because of the voice given and ownership developed among all staff. An example of a leadership training in District B is that they

invested $10,000 (largely funded by parents in the community) in training all of its school principals in the *Levene Model*. In District D, a $15,000 grant helped fund capacity building efforts.

Throughout this impressive undertaking of improving student performance, professional learning communities were developed to help support and sustain the change process. Administrators provided time for teacher collaboration, whether it was before or after school with late arrival or early dismissal of students, or common planning periods during the school day. Teacher collaboration was focused on improving instruction. Evidence of this was found in the change in conversation in the teachers' lounge; slowly but surely teachers began to talk about solutions to student learning challenges and sharing research and best practices with each other on a more frequent basis. In the structured time of common planning, schools set up vertical and horizontal teaming among teachers. Overall it was a culture change in which teachers were considered experts who learned from each other.

A magical formula does not exist for turning a school around, but these key elements provide a common approach to the basics of systemic educational reform. Each district and their schools tailored the process to their individual needs without making excuses of failure to teach all students to standards. In many cases, it was a cultural shift to focus on continuously improving student performance. It required buy-in from teachers and a shared sense of responsibility among the adults in the schools. Staff worked extremely hard to change their practice and their efforts paid off. The next question is: what resources are necessary to run a successful school and district?

Resource Use in Successful Districts

Overall, the school-level resources found in this study were not extraordinarily high or generous. Taking a snapshot of the average school (approximately 650 students) in this study revealed the resources identified in Table 1.

The average number of administrators in the 31 schools studied seems to be fairly close to (while slightly heavy on assistant principals) the FTEs that are funded in the evidence-based model proposed by Lawrence O. Picus and Associates. The evidence-based model calls for 1.0 principal for every 108-432 elementary students, 150-450 middle school students, and 150-600 high school students. At least at the school level, administration is not pulling a disproportionate amount of resources from the overall budget.

Table 1: Washington Resource Use in the Average Sample School (n = 31)

Staff Roles	Evidence-Based Model	Actual FTEs
Principal	1.00	0.99
Assistant Principal	0.44	0.63
Instructional Coach	3.28	0.36
Core Teachers	30.24	22.89
Specialist and Elective Teachers	7.43	7.31
Tutors	2.16	0.12*
Librarian**	1.34	0.63
Pupil Support	3.79	4.02

*Does not include tutors who are classified staff, or tutors providing services to groups of larger than 5 students.
**Does not include library aides.

Table 1 reveals that the schools have few instructional coaches overall. Since, except for categorical dollars, the current state allocation model does not provide resources for instructional coaches, this seems to be the result of tight budgets. Therefore, principals either release a teacher for part of the school day to work with other teachers as an instructional coach, or the district provides an instructional coach that is shared with other schools. The schools that were able to find resources for multiple instructional coaches seemed to be making progress in multiple content areas and grade levels, as opposed to isolated improvement in schools with fewer numbers of instructional coaches FTEs. The evidence-based model provides one instructional coach for every 200 students for elementary, middle and high schools, and as the table shows, this far outnumbers the average number of coaches found in the schools studied.

Examining average core and specialist teacher resources reveals that schools in the study use their staff for core teaching positions in much small proportions than the evidence-based model provides. Qualitative evidence supports these numbers in that most class size reduction efforts at the elementary level were for literacy instruction only or for Title I schools. Middle and high schools did not report class size reduction efforts. The evidence-based model provides for a staffing ratio of one elementary teacher for every 18 students and one secondary teacher for every 25 students. The average teacher-to-student ratio in the sample was 23:1 for elementary schools, 30:1 for middle schools, and 42:1 for high schools. The model funds specialist teachers at 20 percent of core teachers for elementary and middle schools, and 33 percent of core teachers for high schools. The schools studied utilized their specialist teachers very similarly to how the model funds that position. Previous studies of schools in other states show such a much

larger use of specialist teacher staffing. In sum, class sizes in the schools studied were larger than proposed in by the Evidence-Based model, and the proportion of elective teachers was about the same, showing that teacher resources were not in excess supply.

Table 1 also highlights the low frequency of certified teacher tutors used for struggling students during the school day. Many of the schools had tutors, but they were either aides or volunteers, and they were with groups of students larger than the 1:1, 1:3, and 1:5 ratios that research supports. Tutors may also have been provided after school, but again such individuals satisfy the research-based findings that licensed teacher tutors are the most effective and included in the evidence-based model FTEs. The model provides for one tutor for every 100 students eligible for free- and reduced-price lunch. (Schools reported an average of a 0.3 non-certified tutor that provided tutoring services during the school day in groups of five or less.) Tutoring by a licensed teacher is the highest impact extra help strategy, so this is an area where additional funding could make a high impact.

The average number of FTE librarians is about half of what the evidence-based model provides funding for. Of note though is that many of the schools and districts used library aides in the place of librarians as a cost-saving measure. In other words, the model provides for 42 librarians in the schools studied, whereas there were actually 20 FTE librarians employed in these schools. The model also provides for 13 media technicians for every 600 high school students, but the schools hired 22 FTE library aides, or double that number. Even if those two staffing roles were combined, the model provides for more than are actually present in the schools.

In addition to staffing resources listed in Table 1, the 31 schools studied employed 229 instructional aides including aides for: library, resource room, ELL, special education inclusion and resource room, and other areas. The evidence-based model does not provide for any instructional aides. In addition, pupil support such as guidance counselors and nurses were found in a slightly higher proportion than the model recommends funding. There were 124 pupil support staff in the schools studied, versus 117 FTEs that the model would provide. (The model provides 1 FTE for every 100 students receiving free- or reduced-price lunch, plus one guidance counselor for every 250 middle and high school students.)

Professional development budgets for the 2005-06 school year were heavily weighted for substitutes to provide teachers with release time for collaborative planning and trainings. An average of $11,000 per school was spent on substitutes for professional development. An average of $5,000 was budgeted for trainers and consultants. An average of $2,000 was budgeted for travel; $1,800 for materials, supplies and equipment; and $2,900 for tuition reimbursement. Adding in an additional $1,200 in other professional development expenses, each school budgeted an average of $22,000 annual on professional development in the 2004-05 school year. District I invested over $2.2 million in 32 FTE school-based coaches. Nearly all of the funding for these coaches comes from categorical dollars, including federal Reading First and Title II, and I-728 state funding. The district also spent nearly $2.5 million on professional development, including $1 million for stipends and substitutes to provide teachers with additional time for training, and another $1 million for internal and external trainers and consultants.

The more wealthy districts were able to levy local dollars and access funds from local foundations. District A reported that they contributed over $6 million to enhancing its school leadership as well as its teachers. Further, the district pays a good deal of funds to supplement professional development contract days beyond the state's two LID days, spending approximately $3 million. Further, staff members are encouraged to attain enhanced knowledge through professional development and through National Board Certification, which is partially funded by a local foundation. Less wealthy districts such as District F relied on reallocating resources and utilizing trained paraprofessionals to fund their professional development.

According to administrators, startup costs for many of their initiatives came from grants. With the fiscal backing of a Gates grant of $200,000 per year for five years, District D began its improvement process. In addition, a $100,000 grant from the state and the Gates grant helped to propel literacy work forward. District E, also using a $2.7 million five year innovation grant from the Gates Foundation, began to rethink its organization and practice. District G also received a Gates grant and utilized a Gates coach to help develop a new strategic plan for the district.

Technology was reported as an almost all or nothing resource. The more wealthy districts raised local levies for equipment, software, and training. District A currently has a $25 million levy for technology which increases to $51 million for the next five years, which basically pays for all of the technology in the district. In District F, a grant paid for all the teachers in their county to learn the basics and then how to integrate technology in the classroom for two consecutive summers. In an elementary school in District G, all intermediate teachers spent a week of training on integrating technology with curriculum through their Gates funds.

DISCUSSION AND LINKAGES TO OTHER RESEARCH ON SCHOOL IMPROVEMENT

Along with the success stories, these schools and districts revealed common areas lacking improvement. Most notable were the high schools in these districts. Many times the reform efforts began at the elementary level, and never made their way up to the high school. Other improvement processes involved the high school staff simultaneously, but there was more resistance to the change at that level. One middle school principal reported that when they began their restructuring, resistant teachers were given the option to transfer to the high school. Verbal accounts were backed up with the test scores at the high schools studied. There were improvements in some of the high schools, but scores were growing at much slower rates.

Schools in successful districts that did not meet Adequate Yearly Progress (AYP) were all at the secondary level. The one middle school studied that did not meet AYP was on step 2 of AYP having missed the limited English proficiency (LEP) student subgroup in 7th grade math on the WASL. An interesting resource choice is that the school is using only a 0.4 FTE ELL teacher, yet 2.6 FTE ELL aides. There were not any other strategies for these struggling students reported. There were also two out of the six high schools studied that did not meet AYP for the past school year. District C's high school did not meet AYP for both Hispanic and low income students on the 10th grade

WASL test in math. District D's high school did not meet AYP for their low income students' scores on the 10th grade WASL test in math.

Of course there were also high schools in the study that were able to parallel the gains made at the elementary level. District B's high school was able to increase their reading scores from 84 to 93 percent proficient on the 10th grade WASL over the past decade. They also increased writing scores from 63 to 90 percent proficient for 10th grade students. Math and science scores also increased, though at more modest rates. The one Pk-12 school studied was able to make impressive gains in 10th grade student scores in all areas over the last five years. One explanation for this departure from the other secondary performance trends is the comprehensive change process that took place among elementary and secondary teachers. As a result of their small school size, they were all able to work together vertically and horizontally to create and implement change in a seamless process. The other high schools studied that made gains were at modest rates.

Nevertheless, the findings on how elementary and middle schools increased student performance by dramatic amounts over a five year time period – up by 50, 100 and even 200 percent – are similar to other studies across the nation. As summarized in the Evidence-Based report, the Madison, Wisconsin school district followed a similar process and doubled the performance of its low income and African American students over a five year time period; all the resources for this dramatic performance came through resource reallocation, though it should be noted that Madison spends about $12,000 per pupil. The Kennewick, Washington example in the Evidence-Based report came from a recently published book on that district's efforts.

In terms of the processes of turning around schools, there has been a great deal of research over the past decade. So the basic steps for significantly increasing student academic performance are known. In a recent article published in Phi Delta Kappan, Daniel Duke, an expert on school improvement, identified 11 aspects of how to turn around struggling schools. His eleven steps align almost perfectly with the above themes, though sometimes the above themes include more than one of Duke's steps. Duke's eleven steps are:

1. Setting high expectations
2. Developing a collaborative culture and creating a professional community
3. Engaging in data-based decision making including
4. Use of formative assessments
5. Creating and then implementing aligned curriculum, standards and tests
6. Changing the organization of classrooms and schools
7. Providing extended learning time during the normal school day, especially in reading and mathematics
8. Providing even additional help to struggling students
9. Developing a comprehensive, ongoing professional development system
10. Family involvement

11. Strong, consistent and ongoing leadership provided by both principals and teachers.

So what we found in Washington about turning around schools and doubling performance is pretty much what has emerged in other places as well.

Of course the key unanswered questions are:

1. How can all districts and schools be incented to engage in this type of turnaround and doubling performance process?
2. What kind of resources is needed to begin and sustain this process?

In terms of the types of resources, very little school improvement research addresses this issue. Our study of Washington, however, did address the resource use side, and there is a direct link of the findings with the resources proposed by the Evidence-Based model.

We'd like to make three points about the resources needed to initiate and sustain a successful school improvement initiative, one that doubles student performance or gets the vast percentage – 90 percent – of students up to or above a proficiency level.

First, the critical resources are:

- Decent class sizes
- Significant professional development resources, including at least 10 days of pupil free time for training, the funds for the trainers, and most importantly, the existence of instructional coaches in schools who help teachers incorporate the new instructional strategies into their ongoing practice. All of the schools we studied in Washington provided various levels of these key professional development resources. So it appears both from other research and experiences in Washington state that these are core and critical.
- Extra help strategies for struggling students. These extra helps ranged from licensed teacher tutors, to tutoring provided by trained para-professionals, to tutoring provided by volunteers, to double mathematics and reading periods during the day, to before and after school tutoring, to Saturday schools, as well as summer school. These extra help strategies require resources.

Second, these are also the type of resources included in the most successful Comprehensive School Reform programs such as Success for All (Borman, Hewes, Overman and Brown, 2003), so it seems that they are a critical component of a school restructuring and improvement process that changes the curriculum and classroom instructional practice in ways that boosts student academic achievement by significant amounts.

Third, these are the type of resources that are in very short supply in the Washington schools that we studied, which might not be typical of all schools, but were typical of the districts that met the 2004-05 success criteria for the overall Successful Districts study. But more importantly, these are the core extra resources that are included in the Evidence-Based model. The reason they are included in the Evidence-Based model is that each individually has significant research evidence that they are

linked to improved student academic achievement. It also turns out that they were the core resources deployed by both the Washington districts and the schools we studied that significantly improved student academic achievement. So practice in Washington supports the research evidence that these are critical and effective resources.

But we need to close on the statement that the districts and schools studied showed evidence of significant improvement in just 1-2 academic subjects – reading or math, and usually at just 1-2 education levels – elementary or middle schools. There were a few examples of improvement in multiple subjects and in both elementary and middle schools, but only a few. And there were few examples of significant high school improvement. But the goals adopted by the Advisory Committee, which are almost implicitly already the goals of Washington, are for higher performance in all four core content areas – mathematics, reading/writing, science and history – and for elementary, middle and high schools. To meet those goals, which will require most schools to double performance, and triple performance in some cases, schools will not only need to engage in the improvement processes described above, but also will need resources to provide the strategies embodied in those strategies of decent class sizes, significant investments in ongoing professional development, and high impact extra help and extended learning opportunities for struggling students. Without those resources, their improvement strategies will be only partially successful. With them, they should be able to replicate the efforts of the districts and schools studied and the expectation should be that they could double student performance in all four content areas over a 5-10 year time period.

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Appendix A

Washington Learns:
Briefing Document on a Successful District Approach to School Finance Adequacy

WASHINGTON LEARNS:
BRIEFING DOCUMENT ON A SUCCESSFUL DISTRICT APPROACH TO SCHOOL FINANCE ADEQUACY

Prepared for
Washington Learns

Mark Fermanich
Lawrence O. Picus
Allan Odden

Lawrence O. Picus and Associates
4949 Auckland Ave.
North Hollywood, CA 91601

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Briefing Document on a Successful District Approach to School Finance Adequacy

The request for proposal issued by the State of Washington's Office of Fiscal Management requires that the analysis of the state's K-12 school finance system include a study of school funding adequacy using the successful district methodology. One of the key steps in carrying out the successful district approach is to establish the criteria by which successful districts will be selected. In our proposal we noted that we would work closely with the Washington Learns K-12 Advisory Committee and the Washington Learns Steering Committee to define these criteria. This report provides the necessary information for the Steering and Advisory Committees to offer meaningful input into the determination of selection criteria. The sections that follow in this report provide an overview of the successful district approach, outline our proposed strategy for conducting a successful district study, briefly discusses previous studies that have used this methodology, lays out the possible options for selection criteria and the data that are available from various state and federal sources, and lastly, provides recommendations on the criteria to be used to the successful districts whose financial levels and expenditure patterns will be analyzed in the study.

While the central purpose of the briefing report is to get the Advisory Committee up to speed on the issue of selection criteria, a more broad discussion of the successful district approach to adequacy has also been included.

Successful District Approach[2]

The successful district approach attempts to estimate an adequate base level of spending per student by identifying districts that successfully meet state proficiency standards and then determining the average base cost of these districts. By base cost we mean the basic expenditures of a district for regular instruction and district and school instructional operations and administration. The base cost excludes expenditures for programs for students with special needs and for most other non-instructional support programs, such as special education, limited English proficiency, transportation, and food service. Adjustments for these costs are generally made separately. The successful district method has been used in about a dozen states including Colorado, Illinois (Augenblick & Myers, 2001), Kansas (Augenblick, Myers, Silverstein, & Barkis, 2002), Louisiana, Maryland (Augenblick, 2001), Mississippi, Missouri, New Hampshire, New York (Standard & Poor's, 2004), Ohio (Alexander, Augenblick, Driscoll, Guthrie & Levin, 1995; Augenblick, 1997), Tennessee (Augenblick, 2004), and Vermont.

The successful district study process consists of establishing the criteria by which successful districts will be chosen, quantifying the base costs of these districts, and establishing a base cost amount, typically the weighted average of the base costs of the sample districts. To avoid biased results outlier districts, often defined as those with extreme characteristics such as very high or low spending, high or low property wealth, or very large or small enrollment, are excluded from the analysis. As a result, the typical sample of districts included in the analysis consists of non-metropolitan districts of average size and relatively homogeneous demographic characteristics and excludes large

[2] This section draws heavily on Odden, Archibald & Fermanich (2003), and Odden, Picus & Fermanich (2003).

urban districts and small, isolated rural districts. Several studies have employed variations on the standard successful district method in an attempt to compensate for the exclusion of atypical districts (Taylor, Baker & Vedlitz, 2005).

As is the case with all of the methods for determining school funding adequacy, the successful district approach has both strengths and weaknesses. It is one of the few approaches to estimating adequacy that incorporates performance on standards. The base spending level produced by the method reflects actual average spending by districts that have achieved a predetermined level of success on state performance standards or other appropriate performance measures. The method is also conceptually straightforward and therefore relatively easily understood by the public and policymakers.

However, the successful district approach also has its shortcomings. First, it is best suited for states that have well defined performance measures and accountability data. This is necessary for establishing valid selection criteria. Second, critics have argued that successful district studies may be susceptible to manipulation. For example, the criteria used to select sample districts may be constructed in such a way as to select lower spending school districts. Or, as in the case of New Hampshire, only the costs of lower spending districts in the sample may be used in determining the base cost (Verstagen, 2004). As discussed above, another disadvantage of the approach is that by the nature by which districts are selected, outlier districts, particularly urban or poor rural districts, are often excluded from the analysis. As a result, the higher costs that are typically associated with these districts are not addressed in the model. Other methods must be employed for developing cost adjustments for programs for special needs students or for other circumstances such as small size or geographical isolation. Finally,

the results of the analysis do little to illuminate *what* programs and strategies the districts employed to achieve their high level of performance.

Proposed Successful District Study

In our technical proposal (Picus, 2005), we proposed to augment the standard successful district methodology in order to address some of the weaknesses of the approach discussed above. Specifically we proposed:

1. To ensure that relevant and valid criteria are used to select the sample of successful districts we will conduct a comprehensive assessment of the district-level data collected by the state at the present time. A list of potential criteria for identification of successful districts would be presented to the Advisory Committee along with recommendations as to which would be most useful in estimating levels of adequacy funding for schools.
2. To ensure that districts with a wide range of fiscal, geographical and student characteristics are represented in the study, we would work with the Advisory Committee to develop multiple samples of successful districts representing categories of district characteristics that reflect varying education challenges such as poverty concentration or urbanicity/rurality.
3. To address the issue of variation in success over time, we would establish a three to five year time frame and, if possible, only include districts that met the established success criteria throughout the entire time period. However, while this will enhance the consistency of the adequacy cost estimates, it may also dramatically reduce the number of districts identified as successful. If the

districts are further divided into categories as discussed above, the number of districts may be too small to provide generalizable findings.

4. To conduct an analysis, in consultation with the Advisory Committee, of outlier districts, those districts with characteristics significantly different from the norm for the state, to determine if some districts should be removed from the analysis before cost estimates are developed to ensure unbiased results. We will advise the committee as to the statistical validity of "trimming" the sample and the implications of doing so to help them make an informed choice on this issue.
5. To attempt to identify specific patterns of resource use in the sample of successful districts and schools by conducting field studies in up to 10 or 12 districts. If we find clear patterns of resource use for effective educational strategies in the districts, then the state will have additional information and more confidence in the adequacy estimates developed through this approach

The following sections focus specifically on the issue of selection criteria for identifying school districts for inclusion in the fiscal study. First we provide a look at the criteria used in selected studies from other states, then we offer a discussion of the accountability system and associated state data for the State of Washington. Finally, we make recommendations for:

1. Criteria to use in selecting districts in Washington.
2. The partition of districts into specific categories to ensure a broader representation of districts with varying characteristics.
3. Criteria for excluding certain outlier districts from the analysis.

Criteria for Selecting Successful Districts Used in Other Studies

This section takes a brief look at the selection criteria used in several successful district studies conducted in other states. The states included in this analysis are Illinois, Kansas, Tennessee and New York.

Illinois

The Illinois successful district study analyzed a large number of alternative criteria sets for elementary, unified and high school districts and calculated base costs for each of the multiple combinations of district type and criteria set (Augenblick & Myers, 2001). The output criteria consisted of the proportion of students meeting state performance expectations on state assessments in reading, writing and math. The standard ranged from a low of 67 percent of students meeting state performance expectations to a high of 83 percent meeting expectations. No non-academic indicators, such as attendance or graduation rates, were used because an earlier study had found that these indicators had little impact on base cost levels. However, some of the alternatives included a measure of test participation, with a minimum district-wide participation rate of 80 percent set as the standard.

The study also controlled for the concentration of poverty in a district base on free and reduced lunch counts. Finally, a measure of efficiency was included in some of the criteria sets. This efficiency measure consisted of a regression analysis of actual to predicted spending. The regression model included measures of per pupil spending, per pupil assessed valuation, average teacher salaries, and operating tax rate.

Kansas

The study in Kansas originally intended to utilize both input and outcome criteria for the selection of successful districts (Augenblick, et al., 2002). The outcome criteria consisted of the percentage of students scoring at or above proficiency on the following state assessments:

- Reading in grades 5 (70% proficiency), 8 (65% proficiency), and 11 (60% proficiency).
- Math in grades 4 (65% proficiency), 7 (60% proficiency), and 10 (55% proficiency).

A total of 85 school districts met the outcome criteria established for the study.

The input criteria, or measure of efficiency, consisted of a regression analysis of actual to predicted base spending. Base spending included expenditures for instruction, operations and maintenance and administration. Those districts whose actual spending was equal to or less than the predicted spending were considered to meet the input standard. However, because only 35 of the 50 districts meeting the output standard also met the input standard, the input standard was not used in the study.

New York

Similar to the Illinois study, the New York study also used multiple performance criteria and a measure of economic efficiency (Standard & Poor's, 2004). The criteria sets included 1) a comprehensive set of 15 indicators consisting of state test performance data and non-academic indicators; 2) the state's performance index targets for 2006 under No Child Left Behind; 3) the state's performance index targets for 2008 under No Child Left Behind; and 4) the Regents criteria.

Comprehensive criteria. The 15 indicators included in New York consist of the percentage of students meeting state proficiency standards on state assessments for grade 4 language arts, math and science; grade 5 social studies; and grade 8 language arts, math, social studies, and science. Passing rates on the Regents exams for English, math, geography, social studies, and science were also included. The non-academic indicators included retention and dropout rates, cohort graduation rates and Regents diploma rates. A total of 102 districts met all 15 of these criteria.

2006 and 2008 Performance Targets. This criteria set consists of an index representing the percentage of students scoring at basic or proficient levels on English/language arts and math tests in grades 4, 8 and high school. A separate index is calculated for each test. Districts must also have a Regents diploma rate above the state average and a dropout rate below the state average. The performance targets are similar for the two years except that the passing indices were raised for 2008. A total of 180 districts met the 2006 performance target and 108 met the 2008 target.

Regents Criteria. Districts meeting this criteria had to have 80 percent or more of their students scoring at proficient or above on the fourth grade English/language arts test and an average score of 65 or higher on five Regent tests required for graduation. A total of 281 districts met these criteria.

The study also included a measure of cost effectiveness, or efficiency, by calculating the average per pupil spending among the lowest spending 50 percent of districts in each of the four criteria sets. Districts whose per pupil spending exceeded this average were excluded from the analysis.

Tennessee

The Tennessee study used a combination of state assessment performance data and non-academic indicators to select a sample of districts (Augenblick, 2004). The assessment data consisted of a combination of elementary state achievement and value-added tests, high school graduation tests known as Gateway tests, and ACT and SAT scores. The assessment and non-academic indicators were further broken down into a total of 33 indicators on which districts were graded on a scale of A to F. The initial standard used in the selection process was an "A" rating on all 33 indicators. However, no districts met this standard so a revised standard was substituted. The new standard permitted districts to receive a "B" or above on the state achievement test and non-academic indicator components and an 80 percent proficiency rate on the Gateway tests. Districts that met 28 of the 33 indicators under this new standard were included in the sample. Eight districts representing 88,733 students met this revised standard.

The indicators used in the study included the change in the number of students reaching proficiency or meeting or exceeding national norms on state achievement and value-added tests in:

- Grades K-8 reading, language arts, math, science, and social studies
- Writing proficiency in grades 4, 7 and 11
- Gateway tests in algebra and biology
- SAT and ACT scores

The non-academic indicators included:

- Promotion from K-5 and 6-8
- Attendance for K-5 and 6-8

- Dropout rate

The performance goals for each criteria component are listed below.

- Value-added assessments – a year's average growth compared ton national norms in each subject area tested.
- Elementary achievement tests – an average score at the national norm in each subject.
- High school achievement tests – 80 percent of students will meet or exceed proficiency in language and math as a freshmen.
- Writing assessments – an average score at the competent level.
- ACT/SAT – a composite score of 19 or above on the ACT and 910 or above on the SAT.
- Promotion – 97 percent of students in grades K-8 are promoted each year.
- Attendance – system level attendance rates of 97 percent in grades K-6 and 93 percent in grades 7-12.
- Dropout rate – 10 percent or fewer students entering high school as ninth graders will drop out prior to completing high school.

Washington's Standards, Assessment and Accountability System

The State of Washington features a comprehensive, standards-based assessment and accountability system that incorporates content standards in multiple subjects, assessments aligned to the standards, and a reporting system at the state, district and school levels. The following provides a brief overview of the state system. The

information presented in this section was largely taken from the state's accountability plan for NCLB (Office of Superintendent of Public Instruction, 2005).

Learning Standards

The foundation of the state's learning and accountability system are the four State Learning Goals:

1. Read with comprehension, write with skill, and communicate effectively and responsibly in a variety of ways and setting.
2. Know and apply the core concepts and principles of mathematics; social, physical, and life sciences; civics and history; geography; arts; and health and fitness.
3. Think analytically, logically, and creatively, and integrate experience and knowledge to form reasoned judgments and solve problems.
4. Understand the importance of work and how performance, effort, and decisions directly affect future career and educational opportunities.

From these four learning goals are derived the Essential Academic Learning Requirements (EALRs), the standards for what students should know and be able to do in the subjects of reading, writing, mathematics, science, social studies, communications, the arts, and health/fitness. The EALRs for reading, writing, math, and science may be found in Appendix X.

Assessments

Student performance on the EALR standards are assessed by the Washington Assessment of Student Learning (WASL), the standards-based state assessment that is currently administered in reading/language arts and math in grades 4, 7 and 10, and in

science in grades 5 and 8. By spring of 2006 the state is expected to have assessments for reading/language arts and math available for grades 3, 5, 6, and 8 as well. The state also provides an alternative assessment to the WASL, the Washington Alternate Assessment System (WAAS) for students with disabilities. The WAAS is administered to the same grades in the same subjects as the WASL.

The state also administers the Iowa Test of Basic Skills (ITBS) in reading and math in grades 3 and 6, and the Iowa Tests of Educational Development in reading, language arts, mathematics, and interest inventory in grade 9.

Performance Standards

The performance standards adopted by the state are largely driven by the requirements of the federal No Child Left Behind (NCLB) act. The state has established proficiency benchmarks for reading and math in grades 4, 7 and 10 through the year 2014, standards for student participation in the assessments, and benchmarks for graduation and unexcused absence (in lieu of attendance) rates.

Performance standards for the WASL. The performance of students taking the WASL is ranked at four levels: Level 1 is considered Below Basic, Level 2 is considered Basic, Level 3 is considered Proficient, and Level 4 is considered Advanced. Only students scoring at Proficient or Advanced are considered to have met the state standard. Districts are assessed on the basis on the percentage of students scoring at proficient or above on the WASL. Table xx shows the progression of the benchmark for students meeting proficiency standards from the current year's benchmark percentage (differing by grade level and subject) to 100 percent in 2014.

However, many, if not most, districts are not meeting the standards benchmarks. Therefore, a safe harbor benchmark has been instituted to avoid identifying districts as failing to make Adequate Yearly Progress (AYP) under NCLB when they are making significant annual progress. The safe harbor provision is defined as an annual reduction of 10 percent in the number of students not meeting the state standards, or a reduction over two or three years that is equivalent to an annual 10 percent reduction. The safe harbor standard may be the most realistic benchmark or standard for use as an academic performance criterion.

Table 1
Annual Goals for Percent of Students Meeting
State Standards on WASL Assessments

	Grade 4		Grade 8		Grade 10	
Year	**Reading**	**Math**	**Reading**	**Math**	**Reading**	**Math**
2004	52.2	29.7	30.1	17.3	48.6	24.8
2005	64.2	47.3	47.6	38.0	61.5	43.6
2006	64.2	47.3	47.6	38.0	61.5	43.6
2007	64.2	47.3	47.6	38.0	61.5	43.6
2008	76.1	64.9	65.1	58.7	74.3	62.4
2009	76.1	64.9	65.1	58.7	74.3	62.4
2010	76.1	64.9	65.1	58.7	74.3	62.4
2011	88.1	82.4	82.5	79.3	87.2	81.2
2012	88.1	82.4	82.5	79.3	87.2	81.2
2013	88.1	82.4	82.5	79.3	87.2	81.2
2014	100.0	100.0	100.0	100.0	100.0	100.0

The state standard for participation in the WASL assessments has been established at a rate of at least 95 percent for each subgroup.

On-time graduation rate. The on-time graduation rate is determined by the number of students who earn a regular diploma in four years. Students who graduate but take more than four years are excluded from the numerator. The graduation rate standard

in 2005 was 66 percent, with the standard gradually increasing to 85 percent by 2014. A district's graduation rate is calculated using the previous year's data since these data are not available for the current year until after the year has ended. Although data are available for subgroups, for AYP purposes the state only reports school and district level data. Annual goals for the on-time graduation rate are shown in Table xx. The state also reports an extended graduation rate for those students who take more than four years to graduate. This group often includes special education, LEP and migrant students. However, this rate is not used for AYP purposes.

Table 2
Annual On-Time Graduation Rate Goals

Year	Target Graduation Rate
2005	66
2006	67
2007	68
2008	69
2009	70
2010	73
2011	76
2012	79
2013	82
2014	85

A district's dropout rate is used as an indicator in lieu of the on-time graduation rate for secondary schools without a graduating class (e.g. a 12th grade). The annual goal is for a rate of 7 percent or less and to reduce the rate from the previous year.

Attendance/unexcused absences. The state reports the rate of unexcused absences in lieu of attendance rates. The state standard for unexcused absences is one percent or less. Districts above the one percent standard must show a reduction from the prior year to reach AYP. By 2014, all districts must be at or below the one percent standard.

Districts are considered to have met their AYP goals if they meet the proficiency benchmarks for the WASL and the standards for on-time graduation (or dropouts) and unexcused absences.

Report Card

The heart of the state's accountability system is an annual report card that presents aggregate performance and contextual information at the state, district and school levels. At the school district level, the level of interest for this study, the state report card included the following elements for 2004-05:

- Percent of students in grades 4, 7 and 10 meeting standard in reading, math and writing; and the percent meeting standard in science in grades 5 and 8. Data for the current year and the two previous years are included.
- Student data, including enrollment, the percent of students by ethnicity, and the percent of students who are male/female, eligible for free and reduced price lunch, eligible for special education, eligible for LEP, and who are migrants.
- The district's rate for unexcused absences, dropouts, on-time graduation, and extended graduation.
- Teacher and classroom information, including:
    - Number of classroom teachers
    - Total number of core academic classes
    - Number of teachers teaching core academic classes
    - Average years of teacher experience
    - Percent of teachers with at least a Masters degree
    - Percent of teachers with an emergency or conditional certification

- Percent of classes taught by teachers who are highly qualified under NCLB
- Percent of classes taught by teachers who are not highly qualified under NCLB
- Percent of classes in high poverty schools (schools in the state's top quartile of free and reduced price lunch concentration) taught by teachers who are highly qualified under NCLB
- Percent of classes in high poverty schools taught by teachers who are not highly qualified under NCLB
- Percent of classes in low poverty schools taught by teachers who are highly qualified under NCLB
- Percent of classes in low poverty schools taught by teachers who are not highly qualified under NCLB

- Per student revenue and expenditure data

The following section summarizes the state data collected to meet the needs of the state's accountability system and that of NCLB. These data will form the universe of data from which criteria for the selection of successful districts will be drawn.

State School District Accountability and Financial Data

Data Suggested in Proposal

Our proposal suggests looking at district data over time, such as a 3-5 year timeframe. Most data are available for 5 years or beyond, but due to data quality and inconsistency, We would recommend not going any further back than 3 years - 2003-

2005. Even within that time span there will be some data inconsistency and unavailability across all years. The data our proposal suggests using include:

- State performance benchmarks such as:
    - State or other standardized test results
    - SAT/ACT scores
    - Attendance
    - Graduation rates
    - Participation in AP courses
    - Teacher quality indicators
    - Fiscal indicators
- We also suggested we may want to analyze subgroups of districts based on certain geographical or demographic characteristics such as:
    - Geographical regions – some sort of geographical grouping such as Education Service Districts
    - Urbanicity
    - Community or student demographics – grouping districts by levels of poverty, ethnicity, or "90-90" or "80-80" districts – those high poverty districts that beat the odds in test scores

Criteria/Data Used in Other Studies

Based on a review of several APA successful district studies (Illinois, Kansas, Maryland, and Tennessee), the criteria variables they have used or proposed to use include:

- Statewide test scores
- Attendance rates
- Drop out rates
- Curriculum indicators
- Accreditation standards
- State AYP criteria
- Promotion rates for elementary to middle school and middle to high school

Most of these criteria we have already considered or the data are not available in Washington.

Data Available in Washington

Assessment/Performance Data

- WASL – primary state test for accountability purposes. Tests given in math, reading, writing and listening in grades 4, 7 and 10; science in grades 5, 8 and 10. The grade and subject mix has changed year to year beginning in 2003 and earlier. See table below. Data are reported both at district aggregate level and by subgroups, including race/ethnicity, gender, free-reduced lunch, migrant, SPED, and LEP. Test data are available in one form or another back to 1997-98. The state reports participation rates and percent meeting or not meeting standard in subject area.

Table 3
School District WASL Test Results Availability
By Year, Grade and Subject Tested

	Grade	Math	Reading	Writing	Listening	Science
2005	4	X	X	X	--	--
	5	--	--	--	--	X
	7	X	X	X	--	--
	8	--	--	--	--	X
	10	X	X	X	--	X
2004	4	X	X	X	--	--
	5	--	--	--	--	X
	7	X	X	X	--	--
	8	--	--	--	--	X
	10	X	X	X	--	X
2003	4	X	X	X	X	--
	5	--	--	--	--	--
	7	X	X	X	X	--
	8	--	--	--	--	X
	10	X	X	X	X	X
2002	4	X	X	X	X	--
	5	--	--	--	--	--
	7	X	X	X	X	--
	8	--	--	--	--	--
	10	X	X	X	X	--
2001	4	X	X	X	X	--
	5	--	--	--	--	--
	7	X	X	X	X	--
	8	--	--	--	--	--
	10	X	X	X	X	--

- WAAS – is the alternative assessment to WASL for SPED students. Reports participation rate and percent meeting standard by the same subjects and in the same grades as the WASL. Data are available on the OSPI website for 2003-05 and may be available by request for earlier years. Students assessed using the WAAS do not take the WASL.

- ITBS and ITED – the Iowa tests are given in grades 3, 6 and 9. Web-based data are available from 2000 to 2005. Subjects tested vary a little from year to year in grades

6 and 9. The data report participation, national ranking and quartiles. The table below shows the subjects tested by grade and year.

Table 4
School District ITBS/ITED Test Results Availability
By Year, Grade and Subject Tested

	Grade	Reading	Math	LA	Core	Expres-sion	Quant. Thinking
2005	3	X	X	--	--	--	--
	6	X	X	--	--	--	--
	9	X	--	--	X	X	X
2004	3	X	X	--	--	--	--
	6	X	X	X	X	--	--
	9	X	--	--	X	X	X
2003	3	X	X	--	--	--	--
	6	X	X	X	X	--	--
	9	X	--	--	X	X	X
2002	3	X	X	--	--	--	--
	6	X	X	X	X	--	--
	9	X	X	--	X	X	--
2001	3	X	X	--	--	--	--
	6	X	X	X	X	--	--
	9	X	X	--	X	X	--

AYP Data

Files with district summary and detail data are available for 2003-2005. The data reported for 2004 and 2005 are the same, 2003 shows only whether or not the district made AYP overall. Data reported include:

- Whether AYP was met as a district, in aggregate, by grade level, and by subgroup
- Participation rates in reading & math in aggregate and by subgroup
- Percentage of students reaching proficiency in reading and math and by subgroup
- Similar data for continuously enrolled students
- District improvement step of the district

Other Indicators

- Attendance –some attendance data are available but it is incomplete and inaccurate. The state report card includes the rate of unexcused absences. This is available as a district aggregate and by subgroups for 2004 and 2005, but only in aggregate for 2003.
- Graduation rates – these data always lag one year behind, so the data reported on the 2005 report card is for 2004. In 2005 the data include drop out rate, on-time graduation rate, and extended graduation rate (for students in continuation classes) in aggregate and by subgroups. 2004 does not report the extended graduation rate and 2003 and earlier report only the regular graduation rate with no drop out data. No data are posted for 2002 and earlier, but may be available upon request.
- No data on AP course numbers or participation. The CORE student file includes a flag for students eligible for GATE services, but there are no statewide criteria for identifying GATE students, it is a district decision.
- No data on SAT/ACT test participation or scores

Teacher Quality Indicators

The state report card includes considerable data related to teacher quality, including:

- Years of teaching experience
- Percent of teachers with at least an MA
- Number of teachers with emergency or conditional credentials
- Various NCLB highly qualified teacher variables such as percent of teachers meeting HQ definition, percent of classes taught by teachers not meeting HQ definition,

percent of classes taught by teachers not meeting HQ definition in both low and high poverty schools

The data on years of experience and percent having MA or above are available on the web for the years 2003-2005. The other data are available upon request, but may only be available for 2005.

Fiscal Indicators

The state report card includes data on number of classroom teachers, students per teacher and number of core academic classes. Other fiscal data would have to be pulled from the annual financial report (F-195/F-196) files. Some of the report card fiscal data may only be available for 2005.

Student Demographics

Report card data available off of the OSPI website includes most common student demographic variables, including:

- Enrollment – aggregate and by grade and subgroups. However, these data are headcounts and not FTEs used for funding purposes.
- Percent subgroups, including race/ethnicity, gender, migrant, LEP, SPED, free-reduced lunch

The data reported in these files are fairly consistent for the years 2003-2005. Some minor differences in variables included and student subgroups are found for the years 2002 and earlier.

District Characteristics

The proposal states that we may look at subgroups of districts such as by geographical region, by urbanicity, or by high poverty-high success. The state does not collect any

data of this sort, although preliminary 2004 data on certain district and community characteristics, such as urbanicity are available from NCES CCD data. We could construct a subset of high poverty-high success districts using available data from the state. Nearly all of the state datasets include the county and Education Service District in which a district is located.

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Appendix
School District Information 2004-05

County	County SD #	District	Enrollment*	% Minority	% LEP	% Special Education	% Free/Red. Lunch	Collapsed NCES Location
Adams	01109	Washtucna School District	52	17.2%	0.0%	0.0%	58.9%	Small Town/Rural
Adams	01122	Benge School District	10	0.0%	0.0%	0.0%	0.0%	Small Town/Rural
Adams	01147	Othello School District	3,176	78.0%	37.5%	9.5%	75.5%	Small Town/Rural
Adams	01158	Lind School District	243	26.7%	11.5%	8.2%	64.6%	Small Town/Rural
Adams	01160	Ritzville School District	367	7.4%	0.0%	1.1%	41.9%	Small Town/Rural
Asotin	02250	Clarkston School District	2,774	6.4%	0.7%	15.8%	44.1%	Urban Fringe
Asotin	02420	Asotin-Anatone School District	583	5.5%	0.2%	17.6%	31.4%	Urban Fringe
Benton	03017	Kennewick School District	14,433	28.2%	8.0%	11.4%	34.7%	Mid-Size City/Town
Benton	03050	Paterson School District	111	53.2%	37.5%	13.4%	53.6%	Small Town/Rural
Benton	03052	Kiona-Benton City School District	1,632	24.9%	0.0%	0.0%	40.8%	Urban Fringe
Benton	03053	Finley School District	1,030	19.7%	8.9%	11.9%	51.7%	Mid-Size City/Town
Benton	03116	Prosser School District	2,836	48.5%	19.6%	11.0%	56.1%	Urban Fringe
Benton	03400	Richland School District	9,964	14.5%	2.7%	12.9%	22.6%	Mid-Size City/Town
Chelan	04019	Manson School District	586	65.9%	36.0%	11.5%	74.8%	Small Town/Rural
Chelan	04069	Stehekin School District	14	0.0%	0.0%	0.0%	0.0%	Small Town/Rural
Chelan	04127	Entiat School District	386	27.7%	13.9%	0.5%	48.3%	Small Town/Rural
Chelan	04129	Lake Chelan School District	1,320	44.0%	14.4%	11.9%	51.7%	Urban Fringe
Chelan	04222	Cashmere School District	1,481	30.6%	12.6%	8.9%	41.6%	Urban Fringe
Chelan	04228	Cascade School District	1,416	29.6%	13.2%	10.8%	42.7%	Small Town/Rural
Chelan	04246	Wenatchee School District	7,616	38.6%	20.7%	10.8%	48.9%	Mid-Size City/Town
Clallam	05121	Port Angeles School District	4,878	15.1%	0.5%	17.4%	38.7%	Small Town/Rural
Clallam	05313	Crescent School District	178	15.7%	0.0%	0.0%	38.7%	Small Town/Rural
Clallam	05323	Sequim School District	2,950	14.6%	1.8%	12.3%	30.3%	Small Town/Rural
Clallam	05401	Cape Flattery School District	546	70.1%	20.7%	14.6%	65.1%	Small Town/Rural
Clallam	05402	Quillayute Valley School District	1,304	35.5%	8.5%	13.7%	55.4%	Small Town/Rural
Clark	06037	Vancouver School District	22,213	23.6%	8.0%	12.7%	38.3%	Mid-Size City/Town
Clark	06098	Hockinson School District	1,952	4.8%	0.7%	9.6%	12.7%	Small Town/Rural
Clark	06101	LaCenter School District	1,373	7.9%	1.1%	10.2%	20.7%	Small Town/Rural

Clark	06103	Green Mountain School District	119	6.7%	0.0%	13.7%	26.6%	Urban Fringe
Clark	06112	Washougal School District	2,870	8.3%	1.3%	10.6%	28.8%	Urban Fringe
Clark	06114	Evergreen School District (Clark)	25,345	19.6%	7.1%	12.5%	32.7%	Mid-Size City/Town
Clark	06117	Camas School District	4,989	11.4%	2.1%	12.5%	16.2%	Urban Fringe
Clark	06119	Battle Ground School District	12,693	8.2%	3.7%	11.5%	25.1%	Urban Fringe
Clark	06122	Ridgefield School District	1,890	10.7%	1.5%	8.6%	0.0%	Small Town/Rural
Columbia	07002	Dayton School District	563	16.3%	0.5%	9.9%	38.4%	Small Town/Rural
Columbia	07035	Starbuck School District	11	0.0%	0.0%	0.0%	0.0%	Small Town/Rural
Cowlitz	08122	Longview School District	7,441	19.2%	4.1%	14.8%	47.5%	Mid-Size City/Town
Cowlitz	08130	Toutle Lake School District	642	8.6%	0.0%	11.6%	27.9%	Small Town/Rural
Cowlitz	08401	Castle Rock School District	1,397	6.3%	0.6%	13.6%	30.1%	Small Town/Rural
Cowlitz	08402	Kalama School District	1,023	6.0%	0.0%	14.8%	26.1%	Small Town/Rural
Cowlitz	08404	Woodland School District	2,050	13.3%	1.1%	2.3%	27.8%	Urban Fringe
Cowlitz	08458	Kelso School District	5,305	17.8%	2.5%	12.2%	44.3%	Mid-Size City/Town
Douglas	09013	Orondo School District	255	70.6%	38.3%	7.0%	78.0%	Small Town/Rural
Douglas	09075	Bridgeport School District	590	86.7%	0.0%	11.9%	65.3%	Small Town/Rural
Douglas	09102	Palisades School District	46	76.1%	67.4%	10.9%	87.0%	Small Town/Rural
Douglas	09206	Eastmont School District	5,262	32.8%	14.9%	11.9%	45.3%	Urban Fringe
Douglas	09207	Mansfield School District	93	12.9%	0.0%	18.4%	64.4%	Small Town/Rural
Douglas	09209	Waterville School District	371	22.3%	8.7%	9.0%	53.2%	Small Town/Rural
Ferry	10003	Keller School District	50	92.0%	0.0%	0.0%	81.6%	Small Town/Rural
Ferry	10050	Curlew School District	258	10.0%	0.0%	12.5%	46.5%	Small Town/Rural
Ferry	10065	Orient School District	88	6.9%	0.0%	15.1%	67.7%	Small Town/Rural
Ferry	10070	Inchelium School District	236	87.7%	0.0%	7.1%	68.1%	Small Town/Rural
Ferry	10309	Republic School District	484	7.2%	0.0%	4.9%	49.1%	Small Town/Rural
Franklin	11001	Pasco School District	11,162	72.5%	40.3%	12.8%	70.7%	Mid-Size City/Town
Franklin	11051	North Franklin School District	1,894	62.3%	37.2%	11.2%	68.3%	Urban Fringe
Franklin	11054	Star School District	8	37.5%	0.0%	0.0%	0.0%	Urban Fringe
Franklin	11056	Kahlotus School District	80	16.3%	0.0%	0.0%	50.6%	Small Town/Rural
Garfield	12110	Pomeroy School District	403	9.4%	1.3%	16.5%	39.8%	Small Town/Rural
Grant	13073	Wahluke School District	1,774	89.2%	47.0%	13.3%	72.0%	Small Town/Rural
Grant	13144	Quincy School District	2,354	74.0%	0.2%	9.2%	72.8%	Small Town/Rural
Grant	13146	Warden School District	960	73.9%	35.4%	13.9%	72.2%	Small Town/Rural

Grant	13151	Coulee-Hartline School District	215	2.8%	0.0%	12.1%	37.4%	Small Town/Rural
Grant	13156	Soap Lake School District	423	25.9%	24.6%	4.0%	80.0%	Small Town/Rural
Grant	13160	Royal School District	1,415	73.9%	41.0%	9.9%	76.1%	Small Town/Rural
Grant	13161	Moses Lake School District	7,063	36.8%	9.4%	13.2%	56.9%	Small Town/Rural
Grant	13165	Ephrata School District	2,203	20.8%	9.4%	12.4%	34.6%	Small Town/Rural
Grant	13167	Wilson Creek School District	140	8.6%	0.0%	12.9%	49.3%	Small Town/Rural
Grant	13301	Grand Coulee Dam School District	816	54.9%	0.0%	10.0%	45.8%	Small Town/Rural
Grays Harbor	14005	Aberdeen School District	3,925	25.9%	8.1%	12.9%	56.6%	Small Town/Rural
Grays Harbor	14028	Hoquiam School District	2,059	19.2%	1.1%	12.8%	55.1%	Small Town/Rural
Grays Harbor	14064	North Beach School District	738	21.4%	0.0%	10.6%	41.8%	Small Town/Rural
Grays Harbor	14065	McCleary School District	275	6.9%	0.0%	14.0%	38.0%	Small Town/Rural
Grays Harbor	14066	Montesano School District	1,288	10.6%	0.9%	10.8%	25.9%	Small Town/Rural
Grays Harbor	14068	Elma School District	1,937	13.2%	2.3%	15.6%	38.2%	Small Town/Rural
Grays Harbor	14077	Taholah School District	244	96.3%	0.0%	0.0%	67.3%	Small Town/Rural
Grays Harbor	14097	Lake Quinault School District	265	37.3%	13.6%	22.9%	75.6%	Small Town/Rural
Grays Harbor	14099	Cosmopolis School District	190	13.2%	0.0%	3.9%	23.0%	Small Town/Rural
Grays Harbor	14104	Satsop School District	58	18.9%	0.0%	0.0%	52.5%	Small Town/Rural
Grays Harbor	14117	Wishkah Valley School District	208	4.8%	0.0%	3.8%	24.0%	Small Town/Rural
Grays Harbor	14172	Ocosta School District	743	18.4%	2.9%	11.4%	55.8%	Small Town/Rural
Grays Harbor	14400	Oakville School District	285	34.1%	0.0%	16.3%	54.8%	Small Town/Rural
Island	15201	Oak Harbor School District	6,063	29.0%	3.0%	10.8%	30.7%	Small Town/Rural
Island	15204	Coupeville School District	1,199	10.7%	2.6%	11.8%	23.5%	Small Town/Rural
Island	15206	South Whidbey School District	2,143	9.9%	0.5%	11.0%	19.5%	Small Town/Rural
Jefferson	16020	Queets-Clearwater School District	31	90.3%	0.0%	0.0%	0.0%	Small Town/Rural
Jefferson	16046	Brinnon School District	44	6.8%	0.0%	14.3%	53.1%	Small Town/Rural

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Jefferson	16048	Quilcene School District	304	7.6%	0.0%	0.7%	48.9%	Small Town/Rural
Jefferson	16049	Chimacum School District	1,325	9.6%	0.0%	12.7%	33.5%	Small Town/Rural
Jefferson	16050	Port Townsend School District	1,603	12.0%	1.2%	12.8%	35.2%	Small Town/Rural
King	17001	Seattle Public Schools	46,331	58.7%	12.7%	12.4%	42.2%	Large City
King	17210	Federal Way School District	22,602	44.7%	10.0%	12.0%	39.6%	Urban Fringe
King	17216	Enumclaw School District	4,867	9.7%	1.8%	12.0%	20.3%	Urban Fringe
King	17400	Mercer Island School District	4,145	21.2%	1.9%	8.8%	1.8%	Urban Fringe
King	17401	Highline School District	17,612	58.3%	14.2%	12.6%	54.0%	Urban Fringe
King	17402	Vashon Island School District	1,618	9.8%	1.4%	9.6%	10.1%	Small Town/Rural
King	17403	Renton School District	13,236	54.3%	11.3%	12.8%	30.3%	Mid-Size City/Town
King	17404	Skykomish School District	70	8.6%	0.0%	25.3%	0.0%	Small Town/Rural
King	17405	Bellevue School District	15,848	33.9%	8.8%	9.7%	18.6%	Mid-Size City/Town
King	17406	Tukwila School District	2,710	69.0%	29.0%	11.0%	67.2%	Urban Fringe
King	17407	Riverview School District	3,027	10.2%	1.6%	10.2%	9.3%	Urban Fringe
King	17408	Auburn School District	13,760	30.2%	7.4%	10.4%	36.6%	Urban Fringe
King	17409	Tahoma School District	6,745	10.2%	1.5%	12.3%	11.6%	Urban Fringe
King	17410	Snoqualmie Valley School District	4,964	9.1%	0.5%	10.4%	12.8%	Urban Fringe
King	17411	Issaquah School District	15,388	21.8%	1.9%	11.3%	6.6%	Urban Fringe
King	17412	Shoreline School District	9,812	32.4%	5.7%	14.0%	19.2%	Urban Fringe
King	17414	Lake Washington School District	24,177	23.4%	3.6%	9.5%	12.0%	Urban Fringe
King	17415	Kent School District	27,269	36.4%	13.3%	12.2%	34.7%	Urban Fringe
King	17417	Northshore School District	20,490	20.4%	3.2%	13.6%	12.1%	Urban Fringe
Kitsap	18100	Bremerton School District	5,412	33.8%	1.8%	12.4%	52.7%	Mid-Size City/Town
Kitsap	18303	Bainbridge Island School District	4,249	10.0%	0.7%	13.9%	5.0%	Urban Fringe
Kitsap	18400	North Kitsap School District	7,132	19.2%	2.3%	13.6%	24.4%	Urban Fringe
Kitsap	18401	Central Kitsap School District	12,760	17.0%	1.1%	15.6%	25.3%	Urban Fringe
Kitsap	18402	South Kitsap School District	11,136	17.1%	0.3%	12.8%	24.8%	Urban Fringe
Kittitas	19007	Damman School District	41	2.4%	0.0%	9.5%	0.0%	Small Town/Rural
Kittitas	19028	Easton School District	137	13.8%	0.0%	2.4%	34.6%	Small Town/Rural
Kittitas	19400	Thorp School District	174	9.7%	4.1%	0.0%	0.0%	Small Town/Rural
Kittitas	19401	Ellensburg School District	2,875	16.9%	4.6%	9.9%	32.7%	Small Town/Rural
Kittitas	19403	Kittitas School District	586	19.5%	6.2%	0.0%	28.0%	Small Town/Rural
Kittitas	19404	Cle Elum-Roslyn School District	979	8.8%	0.0%	0.0%	32.3%	Small Town/Rural

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Klickitat	20094	Wishram School District	65	23.1%	0.0%	24.2%	77.4%	Small Town/Rural
Klickitat	20203	Bickleton School District	116	19.0%	0.0%	12.8%	0.0%	Small Town/Rural
Klickitat	20215	Centerville School District	76	3.9%	0.0%	11.4%	40.5%	Small Town/Rural
Klickitat	20400	Trout Lake School District	158	8.9%	1.3%	18.2%	0.0%	Small Town/Rural
Klickitat	20401	Glenwood School District	80	38.8%	0.0%	11.5%	38.5%	Small Town/Rural
Klickitat	20402	Klickitat School District	143	12.6%	0.0%	14.5%	65.2%	Small Town/Rural
Klickitat	20403	Roosevelt School District	13	92.3%	66.7%	0.0%	83.3%	Small Town/Rural
Klickitat	20404	Goldendale School District	1,126	15.5%	3.3%	12.4%	50.9%	Small Town/Rural
Klickitat	20405	White Salmon Valley School District	1,204	32.7%	16.0%	14.1%	46.6%	Small Town/Rural
Klickitat	20406	Lyle School District	384	14.1%	0.0%	15.3%	60.9%	Small Town/Rural
Lewis	21014	Napavine School District	708	9.6%	0.0%	11.8%	39.8%	Small Town/Rural
Lewis	21018	Vader School District	64	9.4%	0.0%	20.0%	71.4%	Small Town/Rural
Lewis	21036	Evaline School District	40	0.0%	0.0%	12.2%	0.0%	Small Town/Rural
Lewis	21206	Mossyrock School District	650	16.5%	2.0%	7.9%	52.1%	Small Town/Rural
Lewis	21214	Morton School District	416	6.8%	0.0%	11.9%	52.2%	Small Town/Rural
Lewis	21226	Adna School District	579	5.7%	0.0%	8.2%	24.6%	Small Town/Rural
Lewis	21232	Winlock School District	782	14.4%	9.6%	7.5%	48.6%	Small Town/Rural
Lewis	21234	Boistfort School District	102	8.8%	0.0%	16.0%	59.6%	Small Town/Rural
Lewis	21237	Toledo School District	987	7.8%	0.1%	14.1%	45.8%	Small Town/Rural
Lewis	21300	Onalaska School District	893	16.5%	0.8%	13.9%	34.6%	Small Town/Rural
Lewis	21301	Pe Ell School District	325	9.5%	0.0%	10.0%	53.6%	Small Town/Rural
Lewis	21302	Chehalis School District	2,662	12.5%	2.2%	10.3%	34.7%	Small Town/Rural
Lewis	21303	White Pass School District	592	3.7%	0.0%	12.1%	50.8%	Small Town/Rural
Lewis	21401	Centralia School District	3,427	19.6%	4.5%	11.9%	52.9%	Small Town/Rural
Lincoln	22008	Sprague School District	98	11.2%	0.0%	11.9%	53.5%	Small Town/Rural
Lincoln	22009	Reardan-Edwall School District	646	5.6%	0.0%	9.1%	36.7%	Small Town/Rural
Lincoln	22017	Almira School District	62	4.8%	0.0%	19.7%	36.1%	Small Town/Rural
Lincoln	22073	Creston School District	127	6.3%	0.0%	12.5%	33.3%	Small Town/Rural
Lincoln	22105	Odessa School District	246	2.8%	0.0%	1.6%	43.8%	Small Town/Rural
Lincoln	22200	Wilbur School District	234	19.1%	0.0%	1.7%	49.6%	Small Town/Rural
Lincoln	22204	Harrington School District	146	14.4%	0.0%	10.1%	35.5%	Small Town/Rural
Lincoln	22207	Davenport School District	529	7.7%	0.0%	6.3%	39.1%	Small Town/Rural
Mason	23042	Southside School District	269	3.3%	0.0%	11.5%	40.0%	Small Town/Rural

Mason	23054	Grapeview School District	179	7.8%	0.0%	14.0%	33.7%	Small Town/Rural
Mason	23309	Shelton School District	4,209	25.2%	4.7%	14.3%	46.5%	Small Town/Rural
Mason	23311	Mary M Knight School District	202	11.4%	0.0%	7.8%	50.0%	Small Town/Rural
Mason	23402	Pioneer School District	754	11.3%	0.0%	13.8%	53.9%	Small Town/Rural
Mason	23403	North Mason School District	2,363	13.0%	1.7%	14.3%	34.0%	Small Town/Rural
Mason	23404	Hood Canal School District	287	42.0%	0.0%	17.9%	61.8%	Small Town/Rural
Okanogan	24014	Nespelem School District	181	99.4%	0.0%	21.3%	62.9%	Small Town/Rural
Okanogan	24019	Omak School District	1,769	42.8%	3.0%	17.3%	52.9%	Small Town/Rural
Okanogan	24105	Okanogan School District	1,023	34.9%	11.4%	11.5%	49.9%	Small Town/Rural
Okanogan	24111	Brewster School District	969	78.8%	34.1%	13.4%	66.6%	Small Town/Rural
Okanogan	24122	Pateros School District	302	42.3%	1.3%	13.3%	50.3%	Small Town/Rural
Okanogan	24350	Methow Valley School District	642	5.4%	0.9%	0.3%	37.0%	Small Town/Rural
Okanogan	24404	Tonasket School District	1,084	28.4%	7.9%	13.6%	62.3%	Small Town/Rural
Okanogan	24410	Oroville School District	707	31.9%	15.6%	9.3%	64.9%	Small Town/Rural
Pacific	25101	Ocean Beach School District	1,081	17.8%	4.2%	13.7%	65.2%	Small Town/Rural
Pacific	25116	Raymond School District	549	31.5%	8.5%	16.2%	49.5%	Small Town/Rural
Pacific	25118	South Bend School District	602	42.6%	15.9%	12.2%	58.5%	Small Town/Rural
Pacific	25155	Naselle-Grays River Valley School District	315	8.2%	4.3%	9.5%	45.4%	Small Town/Rural
Pacific	25160	Willapa Valley School District	399	9.9%	0.0%	13.1%	31.9%	Small Town/Rural
Pacific	25200	North River School District	62	16.1%	0.0%	1.6%	0.0%	Small Town/Rural
Pend Oreille	26056	Newport School District	1,197	5.1%	0.0%	12.5%	56.7%	Small Town/Rural
Pend Oreille	26059	Cusick School District	272	31.1%	0.0%	14.4%	40.0%	Small Town/Rural
Pend Oreille	26070	Selkirk School District	373	10.2%	0.0%	10.6%	49.5%	Small Town/Rural
Pierce	27001	Steilacoom Hist. School District	2,195	33.9%	0.0%	14.1%	18.3%	Urban Fringe
Pierce	27003	Puyallup School District	20,096	18.7%	1.4%	11.7%	22.0%	Urban Fringe
Pierce	27010	Tacoma School District	31,787	48.1%	6.5%	14.3%	52.8%	Mid-Size City/Town
Pierce	27019	Carbonado School District	186	1.6%	0.0%	2.2%	0.0%	Small Town/Rural
Pierce	27083	University Place School District	5,361	33.8%	1.4%	12.2%	27.1%	Urban Fringe
Pierce	27320	Sumner School District	8,124	13.7%	1.6%	12.3%	23.9%	Urban Fringe
Pierce	27343	Dieringer School District	1,173	8.2%	0.0%	5.7%	6.5%	Small Town/Rural
Pierce	27344	Orting School District	1,984	10.4%	1.0%	15.4%	25.1%	Urban Fringe

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Pierce	27400	Clover Park School District	12,546	47.5%	7.1%	14.8%	51.8%	Urban Fringe
Pierce	27401	Peninsula School District	9,733	11.2%	0.3%	10.9%	19.5%	Urban Fringe
Pierce	27402	Franklin Pierce School District	7,862	37.5%	3.0%	9.3%	48.8%	Urban Fringe
Pierce	27403	Bethel School District	17,798	31.1%	1.0%	14.0%	30.2%	Urban Fringe
Pierce	27404	Eatonville School District	2,178	8.8%	0.5%	10.2%	28.8%	Small Town/Rural
Pierce	27416	White River School District	4,418	8.9%	0.5%	14.1%	23.4%	Urban Fringe
Pierce	27417	Fife School District	3,242	28.2%	6.8%	9.1%	31.8%	Urban Fringe
San Juan	28010	Shaw Island School District	21	4.8%	0.0%	13.0%	0.0%	Small Town/Rural
San Juan	28137	Orcas Island School District	514	5.6%	1.0%	0.0%	32.7%	Small Town/Rural
San Juan	28144	Lopez School District	265	13.1%	3.8%	14.3%	42.1%	Small Town/Rural
San Juan	28149	San Juan Island School District	965	13.8%	1.6%	10.7%	21.4%	Small Town/Rural
Skagit	29011	Concrete School District	804	9.8%	0.0%	0.0%	48.5%	Small Town/Rural
Skagit	29100	Burlington-Edison School District	3,799	28.0%	13.6%	12.9%	36.9%	Urban Fringe
Skagit	29101	Sedro-Woolley School District	4,540	16.3%	5.0%	15.2%	41.7%	Urban Fringe
Skagit	29103	Anacortes School District	3,036	11.6%	0.7%	10.6%	25.4%	Mid-Size City/Town
Skagit	29311	LaConner School District	637	33.0%	0.0%	3.8%	34.4%	Urban Fringe
Skagit	29317	Conway School District	448	18.4%	0.2%	11.7%	19.9%	Urban Fringe
Skagit	29320	Mount Vernon School District	5,901	47.5%	25.7%	15.2%	57.1%	Mid-Size City/Town
Skamania	30002	Skamania School District	64	12.5%	0.0%	19.7%	43.9%	Small Town/Rural
Skamania	30029	Mount Pleasant School District	65	1.5%	0.0%	17.5%	27.0%	Small Town/Rural
Skamania	30031	Mill A School District	79	12.7%	0.0%	13.8%	56.3%	Small Town/Rural
Skamania	30303	Stevenson-Carson School District	1,049	12.4%	1.3%	16.2%	41.1%	Small Town/Rural
Snohomish	31002	Everett School District	17,893	25.5%	7.7%	12.3%	31.0%	Mid-Size City/Town
Snohomish	31004	Lake Stevens School District	7,616	12.4%	1.8%	12.4%	23.1%	Urban Fringe
Snohomish	31006	Mukilteo School District	14,482	33.8%	12.8%	12.0%	40.6%	Urban Fringe
Snohomish	31015	Edmonds School District	21,115	28.9%	7.8%	13.5%	26.4%	Urban Fringe
Snohomish	31016	Arlington School District	5,464	11.3%	1.7%	12.6%	25.9%	Small Town/Rural
Snohomish	31025	Marysville School District	11,617	23.5%	5.0%	14.4%	31.0%	Urban Fringe
Snohomish	31063	Index School District	30	0.0%	0.0%	7.1%	57.1%	Small Town/Rural
Snohomish	31103	Monroe School District	6,383	16.9%	4.5%	12.3%	20.3%	Urban Fringe
Snohomish	31201	Snohomish School District	9,443	10.2%	1.0%	13.3%	13.4%	Urban Fringe
Snohomish	31306	Lakewood School District	2,623	16.4%	2.2%	13.1%	23.5%	Small Town/Rural
Snohomish	31311	Sultan School District	2,230	13.0%	2.2%	15.9%	34.9%	Urban Fringe

Snohomish	31330	Darrington School District	585	9.8%	0.0%	16.2%	45.2%	Small Town/Rural
Snohomish	31332	Granite Falls School District	2,466	9.2%	0.7%	15.9%	33.1%	Urban Fringe
Snohomish	31401	Stanwood-Camano School District	5,501	8.0%	1.2%	12.8%	20.7%	Urban Fringe
Spokane	32081	Spokane School District	30,923	15.1%	3.5%	14.0%	46.7%	Mid-Size City/Town
Spokane	32123	Orchard Prairie School District	63	0.0%	0.0%	10.8%	21.5%	Small Town/Rural
Spokane	32312	Great Northern School District	43	4.7%	0.0%	11.1%	0.0%	Small Town/Rural
Spokane	32325	Nine Mile Falls School District	1,667	4.2%	0.2%	12.8%	24.0%	Urban Fringe
Spokane	32326	Medical Lake School District	2,262	14.3%	0.2%	12.3%	29.8%	Small Town/Rural
Spokane	32354	Mead School District	8,889	7.1%	0.1%	11.0%	22.5%	Urban Fringe
Spokane	32356	Central Valley School District	11,685	8.7%	1.3%	11.3%	29.3%	Urban Fringe
Spokane	32358	Freeman School District	885	6.0%	0.0%	10.4%	20.3%	Small Town/Rural
Spokane	32360	Cheney School District	3,429	13.2%	0.0%	10.0%	38.9%	Urban Fringe
Spokane	32361	East Valley School District (Spokane)	4,405	10.1%	2.2%	13.1%	42.2%	Small Town/Rural
Spokane	32362	Liberty School District	525	6.3%	0.0%	13.6%	34.9%	Small Town/Rural
Spokane	32363	West Valley School District (Spokane)	3,708	10.9%	0.3%	12.0%	40.6%	Urban Fringe
Spokane	32414	Deer Park School District	2,214	5.6%	0.0%	11.2%	10.8%	Urban Fringe
Spokane	32416	Riverside School District	1,944	4.8%	0.0%	13.3%	44.0%	Small Town/Rural
Stevens	33030	Onion Creek School District	44	13.6%	0.0%	22.6%	75.5%	Small Town/Rural
Stevens	33036	Chewelah School District	1,181	8.3%	0.2%	12.6%	52.0%	Small Town/Rural
Stevens	33049	Wellpinit School District	466	86.3%	0.0%	5.7%	39.6%	Small Town/Rural
Stevens	33070	Valley School District	315	3.1%	0.0%	9.4%	42.2%	Small Town/Rural
Stevens	33115	Colville School District	2,129	7.9%	0.8%	13.2%	47.2%	Small Town/Rural
Stevens	33183	Loon Lake School District	158	7.0%	0.0%	18.1%	60.1%	Small Town/Rural
Stevens	33202	Summit Valley School District	96	9.4%	0.0%	11.3%	42.3%	Small Town/Rural
Stevens	33205	Evergreen School District (Stevens)	22	9.0%	0.0%	17.4%	26.1%	Small Town/Rural
Stevens	33206	Columbia (Stevens) School District	230	37.8%	0.0%	9.1%	69.1%	Small Town/Rural
Stevens	33207	Mary Walker School District	585	13.7%	0.0%	20.0%	12.4%	Small Town/Rural
Stevens	33211	Northport School District	192	12.0%	0.0%	11.8%	71.8%	Small Town/Rural
Stevens	33212	Kettle Falls School District	863	6.8%	0.0%	13.2%	48.3%	Small Town/Rural
Thurston	34002	Yelm School District	4,936	14.9%	0.8%	11.5%	39.1%	Urban Fringe
Thurston	34003	North Thurston Public Schools	13,119	33.1%	1.2%	14.1%	32.6%	Urban Fringe
Thurston	34033	Tumwater School District	6,059	11.5%	0.1%	11.6%	26.8%	Urban Fringe
Thurston	34111	Olympia School District	9,141	19.3%	1.5%	12.4%	18.9%	Mid-Size City/Town

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Thurston	34307	Rainier School District	916	10.3%	0.0%	12.4%	37.2%	Small Town/Rural
Thurston	34324	Griffin School District	679	16.0%	0.0%	6.8%	13.6%	Urban Fringe
Thurston	34401	Rochester School District	2,084	19.3%	3.7%	13.6%	45.5%	Small Town/Rural
Thurston	34402	Tenino School District	1,401	9.7%	0.1%	2.4%	35.2%	Small Town/Rural
Wahkiakum	35200	Wahkiakum School District	501	7.2%	0.0%	13.7%	45.9%	Small Town/Rural
Walla Walla	36101	Dixie School District	35	100.0%	0.0%	15.4%	30.8%	Small Town/Rural
Walla Walla	36140	Walla Walla School District	6,044	33.4%	10.8%	8.8%	46.0%	Mid-Size City/Town
Walla Walla	36250	College Place School District	849	44.0%	20.7%	13.0%	54.4%	Small Town/Rural
Walla Walla	36300	Touchet School District	312	36.3%	12.3%	12.0%	51.1%	Small Town/Rural
Walla Walla	36400	Columbia (Walla Walla) School District	968	22.2%	8.9%	14.1%	37.5%	Small Town/Rural
Walla Walla	36401	Waitsburg School District	369	10.0%	0.0%	14.6%	40.7%	Small Town/Rural
Walla Walla	36402	Prescott School District	264	68.9%	34.5%	12.9%	78.4%	Small Town/Rural
Whatcom	37501	Bellingham School District	10,763	19.2%	4.8%	11.4%	30.6%	Mid-Size City/Town
Whatcom	37502	Ferndale School District	4,955	23.1%	4.8%	13.8%	37.7%	Urban Fringe
Whatcom	37503	Blaine School District	2,272	15.0%	5.6%	11.5%	22.7%	Urban Fringe
Whatcom	37504	Lynden School District	2,761	22.7%	10.3%	9.2%	33.4%	Urban Fringe
Whatcom	37505	Meridian School District	1,520	17.1%	9.8%	15.6%	38.0%	Small Town/Rural
Whatcom	37506	Nooksack School District	1,863	29.4%	9.5%	16.1%	43.7%	Small Town/Rural
Whatcom	37507	Mount Baker School District	2,395	16.3%	9.4%	14.5%	50.8%	Small Town/Rural
Whitman	38126	LaCrosse School District	147	4.8%	0.0%	7.3%	27.7%	Small Town/Rural
Whitman	38264	Lamont School District	37	5.4%	0.0%	23.7%	57.9%	Small Town/Rural
Whitman	38265	Tekoa School District	206	7.3%	0.0%	12.6%	55.0%	Small Town/Rural
Whitman	38267	Pullman School District	2,277	21.3%	1.4%	10.0%	24.8%	Small Town/Rural
Whitman	38300	Colfax School District	726	4.0%	0.0%	11.8%	22.5%	Small Town/Rural
Whitman	38301	Palouse School District	221	6.4%	0.0%	11.7%	31.6%	Small Town/Rural
Whitman	38302	Garfield School District	126	4.0%	0.0%	14.3%	41.2%	Small Town/Rural
Whitman	38304	Steptoe School District	48	0.0%	0.0%	3.3%	0.0%	Small Town/Rural
Whitman	38306	Colton School District	203	0.5%	0.0%	6.6%	11.6%	Small Town/Rural
Whitman	38308	Endicott School District	109	0.0%	0.0%	0.0%	54.2%	Small Town/Rural
Whitman	38320	Rosalia School District	277	7.9%	0.0%	7.2%	43.6%	Small Town/Rural
Whitman	38322	St. John School District	166	7.2%	0.0%	0.6%	24.7%	Small Town/Rural
Whitman	38324	Oakesdale School District	130	0.0%	0.0%	7.3%	37.4%	Small Town/Rural
Yakima	39002	Union Gap School District	585	58.8%	14.0%	14.3%	67.4%	Urban Fringe

Yakima	39003	Naches Valley School District	1,566	16.3%	4.7%	10.5%	31.7%	Small Town/Rural
Yakima	39007	Yakima School District	14,290	64.3%	28.3%	12.9%	72.1%	Mid-Size City/Town
Yakima	39090	East Valley School District (Yakima)	2,551	32.6%	4.9%	12.9%	46.1%	Small Town/Rural
Yakima	39119	Selah School District	3,480	18.7%	4.1%	12.4%	35.7%	Urban Fringe
Yakima	39120	Mabton School District	907	95.3%	34.6%	10.4%	72.8%	Small Town/Rural
Yakima	39200	Grandview School District	3,251	83.0%	23.9%	12.8%	78.9%	Urban Fringe
Yakima	39201	Sunnyside School District	5,732	84.0%	22.9%	10.3%	82.4%	Urban Fringe
Yakima	39202	Toppenish School District	3,345	94.8%	54.6%	11.3%	92.9%	Urban Fringe
Yakima	39203	Highland School District	1,178	58.7%	20.7%	6.8%	65.5%	Small Town/Rural
Yakima	39204	Granger School District	1,267	92.0%	33.7%	9.6%	90.3%	Small Town/Rural
Yakima	39205	Zillah School District	1,317	40.0%	8.9%	10.7%	48.5%	Urban Fringe
Yakima	39207	Wapato School District	3,410	92.3%	29.0%	12.5%	88.9%	Urban Fringe
Yakima	39208	West Valley School District (Yakima)	4,748	20.0%	1.0%	12.0%	21.8%	Urban Fringe
Yakima	39209	Mount Adams School District	1,098	89.6%	11.7%	15.3%	79.7%	Small Town/Rural

Reading

1: The student understands and uses different skills and strategies to read.

1.1 Use word recognition skills and strategies to read and comprehend text.
1.2 Use vocabulary (word meaning) strategies to comprehend text.
1.3 Build vocabulary through wide reading.
1.4 Apply word recognition skills and strategies to read fluently.

2: The student understands the meaning of what is read.

2.1 Demonstrate evidence of reading comprehension.
2.2 Understand and apply knowledge of text components to comprehend text.
2.3 Expand comprehension by analyzing, interpreting, and synthesizing information and ideas in literary and informational text.
2.4 Think critically and analyze author's use of language, style, purpose, and perspective in informational and literary text.

3: The student reads different materials for a variety of purposes.

3.1 Read to learn new information.
3.2 Read to perform a task.
3.3 Read for career application.
3.4 Read for literary/narrative experience in a variety of genres.

4: The student sets goals and evaluates progress to improve reading.

4.1 Assess reading strengths and need for improvement.
4.2 Develop interests and share reading experiences.

Mathematics

1. The student understands and applies the concepts and procedures of mathematics.

To meet this standard, the student will:

1.1. Understand and apply concepts and procedures from number sense—number and numeration, computation, and estimation.
1.2. Understand and apply concepts and procedures from measurement—attributes and dimensions, approximation and precision, and systems and tools.
1.3. Understand and apply concepts and procedures from geometric sense—properties and relationships and locations and transformations.
1.4. Understand and apply concepts and procedures from probability and statistics— probability, statistics, and prediction and inference.
1.5. Understand and apply concepts and procedures from algebraic sense—patterns, representations, and operations.

2. The student uses mathematics to define and solve problems.

To meet this standard, the student will:

2.1. Investigate situations by searching for patterns and using a variety of approaches.
2.2. Formulate questions and define the problem.
2.3. Construct solutions by organizing the necessary information and using appropriate mathematical tools.

3. The student uses mathematical reasoning.

To meet this standard, the student will:

3.1. Analyze information from a variety of sources; use models, known facts, patterns and relationships to validate thinking.
3.2. Predict results and make conjectures based on analysis of problem situations.
3.3. Draw conclusions and verify results—support mathematical arguments, justify results, and check for reasonableness of solutions.

4. The student communicates knowledge and understanding in both everyday and mathematical language.

To meet this standard, the student will:

4.1. Gather information—read, listen, and observe to access and extract mathematical information.
4.2. Organize and interpret information.
4.3. Represent and share information—express and explain mathematical ideas using language and notation in ways appropriate for audience and purposes.

5. The student understands how mathematical ideas connect within mathematics, other subject areas, and real-life situations.

To meet this standard, the student will:

5.1. Relate concepts and procedures within mathematics—use conceptual and procedural understandings among content strands and use equivalent models and representations.

5.2. Relate mathematical concepts and procedures to other disciplines—identify and use mathematical patterns, thinking, and modeling in other subject areas.

5.3. Relate mathematical concepts and procedures to real-life situations—understand the connections between mathematics and problem-solving skills used every day at work and at home.

Writing

1. The student writes clearly and effectively.

To meet this standard, the student will:

1.1. Develop concept and design. Develop a topic or theme; organize written thoughts with a clear beginning, middle, and end; use transitional sentences and phrases to connect related ideas; write coherently and effectively.

1.2. Use style appropriate to the audience and purpose. Use voice, word choice, and sentence fluency for intended style and audience.

1.3. Apply writing conventions. Know and apply correct spelling, grammar, sentence structure, punctuation, and capitalization.

2. The student writes in a variety of forms for different audiences and purposes.

To meet this standard, the student will:

2.1. Write for different audiences.

2.2. Write for different purposes, such as telling stories, presenting analytical responses to literature, persuading, conveying technical information, completing a team project, and explaining concepts and procedures.

2.3. Write in a variety of forms, including narratives, journals, poems, essays, stories, research reports, and technical writing.

2.4. Write for career applications.

3.1 The student understands and uses the steps of the writing process.

To meet this standard, the student will:

3.1. Pre-write—generate ideas and gather information.

3.2. Draft—elaborate on a topic and supporting ideas.

3.3. Revise—collect input and enhance text and style.

3.4. Edit—use resources to correct spelling, punctuation, grammar, and usage.

3.5. Publish—select a publishing form and produce a completed writing project to share with chosen audience.

3. The student analyzes and evaluates the effectiveness of written work.

To meet this standard, the student will:

4.1. Assess own strengths and needs for improvement. Analyze effectiveness of own writing and set goals for improvement.

4.2. Seek and offer feedback.

Science

1. **Systems: The student knows and applies scientific concepts and principles to understand the properties, structures and changes in physical, earth/space, and living systems.**

The system concept includes inputs, outputs, and transfers of matter and energy, and information to understand how the natural universe functions. Systems of the Natural World can be understood in terms of the following three components of physical, earth /space and living systems:

1.1 Properties: Understand how properties are used to identify, describe, and categorize substances, materials, and objects; and how characteristics are used to categorize living things.

1.2 Structures: Understand how components, structures, organizations, and interconnections describe systems.

1.3 Changes: Understand how interactions within and among systems cause changes in matter and energy.

Students develop an understanding of the scientific concepts and principles in the contexts of physical, earth/space, and living systems that can be applied to solve human problems.

2. **Inquiry: The student knows and applies the scientific ideas, skills, processes of investigation, and the nature of science.**

Inquiry describes the skills necessary to investigate systems and asks students to understand the nature of science which gives integrity to scientific investigations. Inquiry represents the application of science concepts and principles to the scientific investigative processes that aims to answer scientific questions about the natural world. These concepts, principles, and processes are expressed in two components:

2.1 Investigating Systems: Develop the knowledge and skills necessary to do scientific inquiry.

2.2 Nature of Science: Understand the nature of scientific inquiry

3. **Application: The student knows and applies science ideas and inquiry to design and analyze solutions to human problems in societal contexts.**

Scientific design process skills are used to develop and evaluate scientific solutions to problems in real world contexts. The application of an understanding of systems and inquiry is comprised of two components:

3.1 Designing Solutions: Apply knowledge and skills of science and technology to design solutions to human problems or meet challenges.

3.2 Science, Technology and Society: Analyze how science and technology are human endeavors, interrelated to each other, to society, and to the workplace and the environment.

APPENDIX B
SAMPLE SELECTION

Sample Selection

To conduct the study, we selected a purposive, non-random, sample in that the study aimed to identify and explore a certain type of school district.

To begin the *Washington Learns* K-12 Advisory Committee nominated ten districts that it believed had drastically improved their students' performance over the last several years.

Next, Washington Office of the Superintendent of Public Instruction (OSPI) employees, based on their understanding of district and school success, submitted an additional list of districts for consideration. This list overlapped to some degree with the list from the Advisory Committee.

Then we conducted four separate quantitative analyses to identify successful districts. This analysis included the successful districts that were identified in Part 1 of this report, as well as those nominated by officials in Washington.

The first quantitative analysis included the list of districts meeting 36, 33, 30, 27, and 24 of the 36 successful school criteria for both the 2005 and 2008 benchmarks as described in part 1 of this report. These were combined with the districts identified by officials in Washington, and the entire list was double checked against the number of successful school criteria each district met. All districts chosen, except for two, met at least 24 of the 36 criteria for 2004-05. The two districts that did not meet at least 24 of the criteria had produced outcomes that were above predicted levels in their high poverty and ELL student subcategories. Consequently we elected to include them in the sample as well.

A second level of the districts analyses was based on results of district rankings for the 2003-04 school year that identified districts who had "beat the odds" by outperforming other districts with similar student demographics. The rankings are based on a series of regression results, weighted by enrollment, that use the percent of students' socioeconomic status (SES), English Language Learners (ELL), and special education as independent variables, and the WASL results for each grade and subject as dependent variables. R-squares for each were fairly high (0.50 - 0.70). The residuals were saved and added together for each grade. For example, residuals were saved from the three regressions for grade 4 in reading, writing, and math, and then combined to create a fourth grade total. These were then ranked. The rankings for each grade were added together to create an average rank. This average rank was then ranked. This reflects overall WASL performance, adjusted for student characteristics, across all content areas and grade levels. Districts were then identified if they fell in the top 10, 20, and 30 percent. Five of the originally suggested districts made the top 10 percent cut. Five of the submitted districts that did not meet the criteria were excluded from the sample. Two districts, not originally submitted for consideration, which did make the top 10 percent, were added when triangulated with other analyses run and when their student demographics were taken into consideration.

A third level of district analyses identified all districts that had increased their percentage of students' achieving proficiency by at least 50 percent on at least two of the WASL reading, writing, and math tests in fourth and seventh grades from 2001 to 2005.

(Tenth grade scores were not included as there was little overall improvement.) Only one district appeared on both these lists, with a total of three of the districts submitted by the Advisory Committee and OSPI staff satisfying the criteria for this level of analysis. One additional district that met this level of criteria was added when other levels of analyses were run and compared to this list.

Once the districts were selected, a school-level analysis applied the same 36 successful schools criteria to WASL scores for grades 4, 7, and 10 in math, reading, and writing, for 2003, 2004, and 2005 to create a total of 27 possible "points" along with three additional "points" possible for high school graduation rate above 66 percent for 2002, 2003, and 2004, six "points" possible for achievement gap in a school compared to the state in 4, 7, and 10 grade in reading and math, and one "point" as a calculated learning index. Schools were then compared against their total points earned versus total points possible. The ratio of the earned versus total points possible was utilized along with the school's poverty quartile, total enrollment, and school level (elementary, middle, high) to identify the schools to be visited in the nine districts that were chosen to be in the sample. In general one elementary, middle, and high school were chosen from each of the nine districts. Two of the districts studied only included elementary or elementary and middle schools because those are the school levels that showed improved student performance. One district wholly consisted of a Pk-12 school.

The final sample included nine districts and 31 schools who were deemed "successful" according to our multi-level series of criteria. All schools and districts agreed to participate, so we did not need to use the one district that we identified in case of attrition. The schools studied included 17 elementary, 7 middle, 6 high, and one Pk-12 school. The total combined enrollment in these schools was 20,365 students. The average percent of students receiving free and reduced-price lunch was 33 percent, very close to the statewide average of 36 percent; the average percent of students with Individualized Education Programs (IEPs) was 12 percent which is almost the same as the 12.3 percent statewide; and the average percent of English Language Learners (ELL) was eight percent, slightly higher than the 7.1 percent of ELL students in the state.

Appendix C

Case Study Reports from each District Involved in the Field Work Portion of the Successful Districts Study

DISTRICT A CASE STUDY

School District A has approximately 16,000 students in its 29 schools: 4 high schools, 5 middle schools, 16 elementary schools, and 4 alternative schools. Community A is basically a suburb of Seattle, just 10 miles east of the big city. A little over half of the students in the district are white (57.6 percent), another 23.6 percent are Asian, and the remaining percent of students come from a variety of other ethnic backgrounds. About 19 percent of students receive free and reduced price lunch. Approximately 27 percent of the students speak one of 66 languages other than English as their first language; however, only 8.6 percent are identified in this district as ESL. There has been a stable administrative vision with the same district superintendent for the past 10 years. This vision has resulted in a strong, district-led effort, in collaboration with school staff and students, to improve student learning and ensure that all students are prepared to go to college. This short vignette, based on information obtained in interviews with the district superintendent, deputy superintendent, and four school principals, describes efforts that have been undertaken in the district to reach their goals to improve student performance, academically and socially.

IMPROVING TEST SCORES IN THE DISTRICT

Over the five years from 2000-2005, District A's WASL scores, on average, have improved across the district, with 7th graders improving the greatest percent. The district attributes the constant and consistent improvements made on these tests to their strategic efforts in standardizing curriculum and focusing on achievement, particularly math. For example, students in the 4th grade scored, on average, 64.9 percent proficient in math in 2000-01 and 74.4 percent in 2004-05, while students in the 7th grade had a math mean score of 50.4 percent proficient in 2000-01 that improved to 72.8 percent in 04-05. Tenth grade student WASL math scores also increased during the five year period, but at a lesser rate. The upward trend in scores also occurred in reading and writing for all three grades 4, 7, and 10. WASL scores in science since 2002-03, however, have not shown the same high levels nor the sharp increases as the math, reading, and writing scores.

DISTRICT A IMPROVEMENT PROCESS

The improvement process in District A has been structured and constant. The superintendent developed a plan for district reform, brought in qualified staff at the district office and in the schools, collaborated with the district school board and Community A Foundation, and communicated improvement plans to all staff and students. As a result, the district has accomplished many goals over the past five years, in addition to the student achievement increases mentioned previously. District A implemented a number of strategies to ensure continuous improvement. This has included developing curriculum that is aligned across K-12, backward curriculum mapping to increase students taking Advanced Placement and International Baccalaureate classes, making available ample resources for professional development, providing numerous

programs and services for struggling students, and enhancing classroom technology. The most significant strategy the district believes has made an enormous difference is that the schools offer seven classes per day, which means a longer school day for students and staff.

Focus on Curriculum Alignment

When the current district superintendent began 10 years ago, one of the first goals for the district was the alignment of curriculum across all grades in all schools. Over the past five years, much of the curriculum offered is now aligned. In order to do this, district administrators reviewed the following:

- Standards, past and present as well as district and state
- Classroom materials
- Current units being taught
- Pacing of lessons
- Lesson plans
- District and state assessments

The district also solicited assistance from an Advisory Alliance on Alignment, comprised of representatives from the district, College Board, TIMMS, the University of Washington, Standards for Success, and Community A. Using the information from their review and recommendations from the advisory committee, the district developed aligned curriculum, first for reading, then for math, followed by curriculum for the other academic disciplines (e.g., science and social studies). District staff in each of the content areas met with school administrators and teachers to get their feedback, leading to some initial revisions. In addition to in-house curriculum development, the district purchased several research-based curriculum packages, such as *Math Investigations*. All curricular materials are purchased by the district, with schools only purchasing replacement materials. Once the curriculum was established, district curriculum technology coaches in all disciplines worked, and continue to work, directly with school staff to ensure appropriate implementation of the curriculum. It should be noted that although the position title for these district curriculum coaches includes the term "technology," their responsibility is to direct, monitor, and assess curriculum alignment and implementation. The reason for the term "technology" in the title is more reflective of monies used to fund these positions, i.e., some from technology levy funds. Just recently the district developed a web site in which all content-based lessons and units are available to all school staff. The information on the web site can be manipulated interactively so that changes can be made and updates posted in real time.

College Preparation for All Students

The district set a goal to increase the number of students: 1) prepared for advanced courses, 2) submitting applications to take advanced courses, 3) taking either AP or IB courses, 4) improving scores on college entrance exams, and 5) getting into institutions of higher education. First, all schools have increased their expectations for all students in all

academic areas. Second, students are encouraged from elementary school on to pursue additional projects and extra assignments to prepare for advanced learning and classes. Third, students are made aware of what advanced classes are offered and what they would need to do to be eligible. Over the past several years, one major strategy has been to identify students with potential for advanced coursework and any issues that would get in the way of these students getting into AP classes. The district strongly believes that it has helped to articulate curriculum by promoting AP classes. In the last year, 85% of District A's high school students have taken at least one AP course. District A students' scores on both the PSAT and SAT exams have increased in the last several years. Plus, a greater number of District A students are attending Ivy League and other college programs.

Professional Development

Most of the professional development in District A is district-driven with district funds, often focused on district curriculum. The district has put additional resources (over $6 million) into enhancing its school leadership as well as its teachers. District A offers a week-long leadership institute. Besides the basics of curriculum, management, and accountability, the district focuses on the use of data and assessments. Further, the district pays a good deal of funds to supplement professional development contract days beyond the state's 2 LID days, approximately spending $3 million. Much of this professional development is focused on curriculum and lesson study. As mentioned previously, much professional development outside of training sessions, book studies, and state-sponsored workshops, is provided by the district curriculum technology coaches that are based out of the district office but spend most of their time in the schools.

Individual schools do have some school-based professional development; however, this is the exception rather than the rule. Some schools have even offered staff retreats to enhance the professional development provided by the district and promote professional learning communities. Staff are encouraged to attain enhanced knowledge through professional development and through National Board Certification. Part of this professional development is funded by the Community A Foundation. They provide approximately $1.5 million to schools each year; however, only a small portion of that is used for professional development.

Professional development in this district is not just trainings and workshops. Each school has grade-level and department-level team meetings which are often used to enhance staff development. But the most significant resource for professional development across the entire district is the early release day every Wednesday. Students leave school two hours early on that day giving teachers time for planning and professional development that is directly included in their contracts. This time can also be spent helping those students who are struggling.

Strategies for Struggling Students

District A has devoted increased resources to ensure all students, but particularly struggling students, meet or exceed standards. A major strategy implemented over the past several school years has been support classes shared across the district and implementation of the AVID (Advancement Via Individual Determination) program. Another strategy used to help struggling students is tutoring. Teachers use their release day time on Wednesdays or the one hour after school they remain on campus the other four days. All tutoring in the district is voluntary; however, teachers encourage those students that need additional help to stay after school. These drop-in tutoring sessions, along with summer school provide much of the additional assistance for students needing it. Some of the funds used to support these efforts are Title I. Summer school is provided by the district and is on a sliding fee scale. The district also offers a Head Start program, both full- and part-day, as well as full-day kindergarten. Similar to summer school, there is a sliding fee scale for these programs, with students receiving free lunch able to attend for free and those receiving reduced lunch paying a small portion. Several other initiatives in the district have been implemented. One is focused on ESL students. The district provides funding for an after school program for these students and each school decides if this fulfills a need and offers something appropriate for their population. Another is reduced class sizes for Title I schools. The district uses I-278 funds as well as other crossover funds. Although helpful to struggling students, all students benefit by the seven periods of instruction offered daily. This initiative is funded primarily from levy monies.

Enhanced Technology

The District A strongly emphasizes using technology in teaching and student learning. Currently, they have a $25 mil levy for technology which increases to $51 mil for the next five years. Basically, this pays for all of the technology in the district and they have put it to good use. Every classroom in every school has a smart board, both curriculum and grading interactive web programs have been developed and implemented, each teacher is provided with a computer, all campuses are wired and have more than ample hardware and software. Generally, the district pilots a program or best practice using technology and then makes it mandatory. Additionally, the district runs an IT department that provides necessary assistance to all schools. Again, the message is clear that initiatives are district-driven in District A.

LESSONS LEARNED

District A has made enormous strides in student learning over the past five years, much related to its district decision making practices and alignment of curriculum, technology, and services across all of its schools. The district established goals to improve teaching and learning and has used a number of strategies to achieve these goals.

- They recalibrated goals for student learning by setting student performance goals based on WASL data.

- They re-engineered their schools by aligning curriculum K-12, restructuring the school day to offer seven periods, and incorporating an early release day one day a week.
- They redesigned professional development to be district-driven and focused on curriculum and leadership.
- They reinforced achievement for struggling and at-risk students by providing supportive services such as additional classes and tutoring.
- They retooled school technology by providing hardware and software for all classrooms, as well as developing web-based, interactive programs for curriculum and grading.

By implementing these strategies, District A has shown improvements in student achievement and advanced placement, staff knowledge and skills, and instructional leadership. School District A continues to need funding for coaches, planning time for teachers, and staff development time and funds.

DISTRICT B CASE STUDY

School District B has approximately 4,000 students in its 6 schools: one high school, one middle school, three elementary schools, and one alternative learning center. Community B is a small island community a short distance from a major metropolitan area with a little over 21,000 residents and a median household income of close to $92,000. The majority of students in the district are white (84 percent), another 12 percent are Asian, and the remaining percent of students come from a variety of other ethnic backgrounds. A very small percent of students receive free and reduced price lunch. Over the past five years, the district has had a number of changes in its administration. Specifically, five years ago they hired a curriculum director and an assessment director, both of whom began moving the district toward more standardization. Additionally, three years ago the district hired the current superintendent who has worked closely with the School Board of Directors and the Community B Foundation to begin to implement plans, and some actions, for increased accountability, student learning, and teacher effectiveness. The district was described as "school-led" five years ago, with individual instruction leading the system, and is now shifting to a more "district-led, comprehensive" approach to decision making and systemic reform. This short vignette, based on information obtained in interviews with the district superintendent, district business service manager, and four school principals, describes efforts that have been undertaken in the district to enhance student learning.

IMPROVING TEST SCORES IN THE DISTRICT

On average WASL math, reading, and writing scores for students in District B have been at an above average level. However, over the five years from 2000-2005, the district attributes the constant and consistent improvements made on these tests to their strategic efforts in standardizing curriculum and focusing on achievement. For example, students in the 4th grade scored, on average, 89.2 percent proficient in reading in 2000-01. This climbed to 97.3 percent in 2004-05. This same trend in reading improvement occurred in scores for grades 7 and 10. Similar increases in math achievement are found across the three years tested on the WASL over the five year period. The most significant improvements in WASL scores were in writing. Tenth graders averaged 66.9 percent proficient in 2000-01 and 88.9 percent in 2004-05. WASL scores in science since 02-03, however, have not shown the same high levels nor the sharp increases as the math, reading, and writing scores.

DISTRICT B IMPROVEMENT PROCESS

The improvement process in District B has been slow, but steady over the past several years. For a long time, improvement was not the main focus since the students in this district, on average, did well on achievement tests, college qualifying exams, and matriculation to higher institutions of education. However, as the push for accountability

and standardization across the nation and in the state of Washington became more prevalent, the district began to rethink and develop plans to enhance student success for all of the students in the district. As a result, standards became a priority, staffing changes were made at the district- and school-levels, leadership improvement was confronted, professional development was expanded, and strategies to assist at-risk students were increased. Significant to the improvement process in this district is the goal to advance all students, not only those who are struggling but those who already reach relatively high levels of attainment.

Focus on Curriculum Standardization

The district's curriculum director initiated an effort to begin standardizing curriculum across the district approximately five years ago. The main focus has been on math and literacy and some writing. At first, the district held meetings with members of the District B School Board, Community B Foundation, and parents to discuss the initiative and possible funding. The district then met with their school administrators and teachers. They identified district needs based on achievement test scores and used Washington state standards as a basis for district curriculum decisions aligning with these standards. District and school leadership began to attend book study sessions once a month, often putting forth ideas for types of research-based curriculum that could benefit the district. With the financial help of the Community B Foundation, several curriculum packages were purchased, including *Chicago Math* for the high school level and the *Houghton-Mifflin Literacy Program* for K-8. The total amount spent was $600,000, some of which was from district funds and a large portion from Foundation funds. Additionally, the district funded and implemented *DMI (Discovery Math Investigations)* for students in K-5 across the district. Over the past several years, the district has formulated standards for math and some for literacy. They are currently working on writing standards and have future plans to focus on science.

Educational Leadership

There have been major changes in school and district administration over the past five years. In addition to the curriculum and assessment director positions in the district office, an associate director was also added. There has also been almost complete turnover in school principals in the district. The past few years have been stable in regard to educational leadership in the district. These personnel changes have been instrumental in moving the district from teacher-led, total site-based decision making to a balance of district- and teacher-led systemic efforts. At the same time the district has put much effort into enhancing its school leadership, especially training administrators to be leaders. With the majority of funding from parents in the community, the district invested $10,000 in training for all of its school principals to learn the Levene Model. This model embeds goals related to nine stages of student learning into the curriculum. Principals have then worked with their teachers to learn this model and implement it into the lesson plans they develop. Another effort to enhance educational leadership in the district has focused on its K-5 principals. For the past several years, four times a year, the three elementary principals are provided a release day and are replaced with a district staff member so that

the principals can attend a leadership training session provided by the district. Further, the district has just begun to push all of its educational leaders to move toward a professional learning community model. Over the last several years, this has evolved into the beginning use of collaborative decision making, increased principal instructional leadership, mentoring for all first-year teachers, use of instructional coaches in some schools, and increased professional development. The district has incorporated a path of learning for all of its instructional leaders, including workshops, book studies, and planning meetings resulting in written, instructional leadership plans. Many of these same modalities have been used to enhance the professional development of teachers and other instructional staff.

Professional Development

The new administration in the district over the past three-five years, have made professional development a high priority, not just for the educational leadership in the district but for all of its school staff. As mentioned previously, the district purchased and implemented a number of curriculum packages. For each, teachers and other instructional staff have attended training on the models, processes for implementation, assessment tools used in the models, and instructional strategies useful with the various curricular programs. Another professional development focus, for some of the more experienced teachers in the district, has been to provide training in math coaching with the goal of working with less experienced teachers and other instructional staff. Other professional development topics offered to all staff in District B have included differentiated instruction, classroom management, working with paraprofessionals, and ESL. Many teachers and administrators are encouraged to and do attend OSPI trainings and other state-sponsored trainings. Some of the above professional development is provided during the two state-sponsored LID days. A few of the schools described making additional school resources, i.e., funds, time, and substitutes, available for professional development other than the LID days; however, none specified a particular amount for this. Rather they stated they determine what is needed as it is needed. The bigger picture for professional development in this district is that much of what is offered to teachers and other school staff, as well as school administrators, is paid for by parents in the district. When they see a need, they often initiate bringing in experts in the field to meet with staff or purchasing large quantities of text to distribute across the district. Frequently, the parents work with the school staff to determine different trainings and attend them along with the staff.

Professional development in this district is not just trainings and workshops. Each school has grade-level and department-level team meetings which are often used to enhance staff development. But the most significant resource for professional development across the entire district is the early release day every Monday. Students leave school one and one-half hours early on that day giving teachers time for planning and professional development that is directly included in their contracts. Of the average four Mondays in a month, one is devoted to district-led staff development. Teachers most frequently, but at times the school principal, will determine how the other monthly Monday release times are spent.

Strategies for Enhanced Academic Achievement

As has been prevalent for many years, parents in the District B community pay for private tutoring for their children that need assistance. However in the past two years, District B has devoted increased resources to ensure all students can compete academically and socially, meeting and exceeding set standards. This has been especially beneficial for those students identified as at-risk or struggling. First, teachers are expected to develop a student learning plan for these students. One of the focus areas has been on math. A major strategy begun in the 2004-05 school year was side-by-side math classes for middle and high school students needing extra help in the subject. These classes entail pre-teaching (i.e., a preview of upcoming math to be offered), reviewing lessons, and/or filling a knowledge gap. Most often the classes serve as a follow-up of math already taught but not understood well. Students take the class back-to-back with their other math class, hence the title "side-by-side." Implementing these classes required one additional certified teacher FTE for every 1,100 students in the school. At the same time, two other strategies to enhance math learning were started. These are drop-in tutoring sessions available three nights per week and summer school in math for students needing support. Some of the funds used to support these efforts are Title I; however, the majority is paid for by parents in the form of tuition. To assess 5^{th}-9^{th} grade students' math abilities, and begin to see if the strategies they have implemented are working, the district implemented using the Terra Nova this school year at a cost of $30,000.

Several other initiatives in the district have been implemented focusing on transitioning students. For middle and high school students, the district implemented "BRIDGES," a transition program for approximately 20 students each year who struggle with the transition from middle to high school and also from high school to higher education. This group of students is provided a teacher advisor who spends a little more than an hour each week with the students, some as a group and some individually. The district funds a 0.4 FTE coordinator (teacher) to support this program. Another effort has been to transition students who would not traditionally be targeted for advanced placement into these courses by identifying skills early and encouraging participation. For elementary students, the district has attempted to increase communication between staff of the pre-k program and kindergarten program to help transition students. The district offers one pre-k program for which they pay the cost for special education students only. Other students are funded through tuition paid by their parents. Similarly, in the district's kindergarten program, parents pay tuition for the other half of the full-day program that is not funded by the state's Kindergarten Assistance Program funds. There is no sliding scale in this district.

LESSONS LEARNED

Although students in District B have generally achieved well academically, the district has set its sights on improved teaching and learning through a variety of strategies.

- They recalibrated goals for student learning by setting student performance goals based on WASL data.
- They re-engineered their schools by setting curriculum standards and focusing on math and reading.
- They redesigned professional development to focus on building and enhancing educational leadership.
- They reinforced achievement for struggling and at-risk students by providing supportive services such as additional classes, tutoring, and transition programs.

By implementing these strategies, District B has begun to see positive changes in student achievement, staff stability, instructional leadership, and parent/community satisfaction. District B relies on the resources they receive from the Community B Foundation, including financial, advisory, and community support. Without these resources, or others to replace the financial resources they provide, the district would not be able to continue its improvement efforts.

DISTRICT C CASE STUDY

School District C is located in a rural, agricultural area in central Washington. The district serves a small city with a population of less than 15,000, and the surrounding countryside. The district's 7,063 students are served by 8 elementary schools, 2 middle schools and one high school. The majority of the district's students, 63 percent, are white, with the majority of the remaining students of Hispanic ethnicity. Fifty-seven percent of the district's students are eligible for the federal free- and reduced-price lunch program, 9 percent are eligible for limited English proficiency programs and 13 percent for special education services. Due to the rural nature of the district, it enjoys strong community support. As a result it has managed to pass a supplemental operating levy of nearly $1,300 per student and bonds for building new or improving its current facilities.

As is the case for many school districts, the state's accountability program and the federal No Child Left Behind legislation pushed the district to redouble its efforts to improve the academic performance of all students. The focus of these improvement efforts has revolved around the state's Essential Academic Learning Requirements (EALRs) and performance on the Washington Assessment of Student Learning (WASL) in reading, writing, math and science. The district has established a goal of 90 percent of its students meeting state standards on all components of the WASL. Although the district's central office has been the catalyst for the improvement process, the district's long tradition of site-based management has placed much of the responsibility for improvement on the shoulders of the individual building principals.

Over the past five years the district has made substantial progress toward meeting its performance goals. In 2000-01 the district's scores on the WASL trailed state averages across all grades and subjects tested, in some cases by significant margins. By 2004-05 the district's performance exceeded state averages in 4th grade reading and mathematics; 5th grade science; and 7th grade reading, writing and mathematics. The district has also made significant progress toward closing the gap in 8th grade science and 10th grade WASL scores. In reading and mathematics, the district's highest priorities, the percentage of students meeting state standards more than doubled except for 4th and 10th grade reading, where they increased by 79 percent and 35 percent respectively. This vignette, based on interviews with central office staff and four building principals, tells the story of the district's efforts and strategies for making substantial improvements in student performance.

IMPROVEMENT THEMES

Due to the decentralized nature of School District C its improvement process must be viewed from two perspectives. The first consists of the central administration's goals, responsibilities and requirements, in other words the nonnegotiable components of the process. The second consists of the school-based initiatives, those strategies implemented on a school-by-school basis. The district views its principals as the chief instructional leaders in the district and provides them with the freedom and resources to

establish and implement an instructional vision for their buildings within certain parameters.

The district's central office views its role as providing clear goals, expectations and guidance focused on teaching and learning, adopting high-quality textbooks and materials that are aligned with the state EALRs, offering extensive professional development on the new curricula and in instructional strategies that reflect best-practices in problem-based learning, providing teachers access to an extensive array of fine-grained data on student performance, providing schools with the resources and programmatic flexibility necessary to meet district goals and expectations, and providing certain district wide supports for students who are performing below grade level or failing to meet state standards.

The role of school leaders is to create a vision of effective instruction aligned with district goals and curricula and to use the resources available to them to implement this vision. As a result, the instructional program of each school is fairly unique except for certain components mandated by the district such as the core curricula and extended learning time for struggling students.

The following section provides a more specific description of some of the key components of the district's improvement strategy along with several examples of creative strategies adopted by the district's schools.

INSTRUCTIONAL IMPROVEMENT

In order to meet its goal of 90 percent of students meeting state standards the district has focused most of its efforts on improving teaching and learning throughout the district. It has done this by first adopting high quality instructional materials aligned with state standards. All materials adopted district wide go through an extensive review process to ensure that they are aligned with the state's EALRs and Grade Level Expectations (GLEs). The textbooks adopted by the district support its view of good teaching, which embodies engaged students involved in active learning. Texts adopted by the district emphasize project-based learning where students construct meaning and develop their problem-solving skills. For example, the district adopted the Foss and STC science curricula for elementary grades this year, both of which are very hands-on and aligned with state and national science standards. The district is currently reviewing new mathematics curricula with similar characteristics for adoption next year.

The district then provides substantial professional development opportunities for teachers to improve their instructional knowledge and skills. Much of this professional development is focused on the content areas of reading and mathematics and the district vision of effective teaching that engages students in problem-based and project-based instruction. The district supports teacher engagement in professional development by providing for training opportunities from both internal and external trainers and consultants, by providing teachers additional time for training, and by funding district coaches and school-based teacher mentors.

The district provides a substantial amount of non-student contact time that may be used for professional development, although according to the teacher contract all but 6 hours of this time is controlled by individual teachers and may be used for other purposes such as classroom setup and teardown, parent conferences, or open houses. In addition to the two state professional development days this time totals 14.5 days for elementary teachers and 9.5 days for secondary teachers. While this time is not explicitly set aside for professional development, the district encourages productive use of the time by requiring teachers to submit reports on how they utilized this time.

In addition to extra time for professional development, the district funds two full-time coaches to work with elementary teachers on improving literacy instruction and one full-time coach for improving instruction for English language learners. Although the district feels that a staffing strategy of one full-time coach each for literacy, mathematics and science per school would be more effective, looming budget cuts for the 2006-07 school year makes an increase in the approximately $210,000 coaching budget unlikely.

The district also provides assistance to new teachers through a mentoring program where new teachers are paired with a senior teacher from their building. The teacher mentors are experienced classroom teachers who receive a stipend and some release time for their mentoring role. The teacher and mentor teams engage in peer observations and attend 6 classes per year that address assessments, classroom management, the state ELARs, and district curriculum.

Finally, the district worked with a local consultant to develop an extensive web-based student achievement data system that is linked to the state student reporting system. Combined with the district's assessment calendar, including administration of the Northwest Evaluation Association assessments in the fall and spring, this system gives schools access to extensive, fine-grained data on student performance. The district's assessment director dedicates a substantial amount of time to working with school staffs on more effectively using the student data available to them.

As noted above, school leaders play a pivotal role in establishing instructional improvement strategies for meeting the district's performance goals. For example, in one K-5 elementary school student assessment data are used to ability group students in the core subjects of reading and mathematics. The school sets aside the entire morning for uninterrupted small group instruction in these two core subject areas. Group sizes are kept small by using trained instructional aides and specialist teachers. In the afternoons the students are regrouped by grade levels for their other classes. The school also uses state I-728 funds to extend one of its half-day kindergarten sections by two hours per day and to pay for an additional full-time teacher to reduce reading and mathematics group sizes and to teach physical education two days per week.

One of the district's middle schools provides another example of innovative improvement strategies. This school organizes itself into houses of 75-100 students and sets aside two two-and-a-half hour blocks of uninterrupted instructional time in the core

subjects each day. This schedule also provides each house's teaching team an hour of collaborative planning time per day. Staffing multiple houses of this size is made possible by the school's use of state I-728 funds to hire an additional 2.5 full-time teachers.

SERVICES AND INTERVENTIONS FOR STRUGGLING STUDENTS

As is the case with instructional improvement in this district, interventions for students who need additional help are a mix of district wide and school-based programs. The district pushes a fair amount of resources down to school-based budgets to facilitate developing their own strategies. The following provides a brief summary of the services available to students in the district's schools.

Early Childhood**.** The district offers a Title I funded prekindergarten program for four year olds who are highly mobile and unprepared for kindergarten. About 24 students are served per year in two sections, each staffed with a teacher and an instructional aide. The district spends about $100,000 for the program. However, because of tight budgets this may be the last year of the program.

Full-Day Kindergarten. There is no district wide strategy for full-day kindergarten, but some of the elementary buildings, such as the one in the example above, have extended their half-day programs by a few hours or by offering an all day class every other day. The schools pay for this by using their extended day dollars or state I-728 funds.

Class Size. The district funds an additional 12-15 teacher positions for class size reduction in grades K-4. These additional staff provide one additional full-time teacher per elementary school, plus up to one additional full-time teacher in elementary schools with a high proportion of at-risk students.

Extended Learning Time. The district provides additional funding to all schools for extended learning time for struggling students. State I-728 funds are the primary source, but secondary schools also tap into federal Gear Up grant dollars. How this time is configured is left up to individual schools, but extended time is generally scheduled for before and after school, during lunch, or during the Christmas and Spring breaks. Typically, teachers from the school, supported by aides, tutor small groups of 3-8 students using the school's standard curriculum or supplemental intervention programs aligned with state standards. Because these programs are school-based, there is little comprehensive information about total staffing or costs across the district. The district also provides transportation for after school programs to ensure access for all students.

Tutoring. The district's schools have few, if any, full-time certified teacher tutors. Some of the tutoring during extended learning time is provided by regular classroom teachers who receive additional pay if they tutor during their prep period or before or after their contract day. Instructional aides also provide one-on-one and small group tutoring in the elementary schools. In secondary schools, about $750,000 in Gear Up

grant funding is used to pay community college students and other community adults to do tutoring. Most of the tutoring is conducted in small groups of 3-5 students in the classroom or during elective periods rather than through pull out programs. The Gear Up tutors are monitored by classroom teachers and may receive some training in the intervention strategies with which they work.

Summer School. The district offers a 5-6 week summer school program that serves 350-400 students in grades K-12. The program is remedial for elementary and middle school students. These students are taught using intervention program materials aligned with state standards and the regular course curriculum. The high school program is almost exclusively for credit retrieval for students who need to make up credits for graduation.

The district also offers a special summer program for migrant students to make up for course time missed while out of the district or in anticipation of leaving the district for a period of time. This program permits these highly mobile students to earn credits necessary for graduation.

English Language Learners. The district supports a number of programs to help students with limited English proficiency meet state standards. These interventions vary by school level. At the elementary level a pull-out model staffed by bilingual aides is used. These aides work with students for a half hour per day, although monolingual students may receive an hour or more of services per day. At the middle school level there is a district-wide new-comers class for monolingual students that uses the Steck-Vaughn and High Point reading programs. Depending upon their level of English acquisition these students may stay in this program until they transition to high school. Finally, the high school offers lower-skilled students 1 or 2 blocks of ESL or sheltered English per day. It also offers a Migrant Living Skills Program that teachers study skills, homework skills, and understanding how high school works.

LESSONS LEARNED

School District C has made significant progress toward meeting, and in many cases surpassing, the state average performance on state assessments. However, it still has a lot of work ahead of it to meet its own goal of 90 percent of students meeting state standards on the WASL in all subjects. The success of the district may be attributed to the following five core strategies:

- They **recalibrated** their goals for student learning by focusing on the state standards in the core subject areas and raising expectations for all students.

- They **re-engineered** their schools by concentrating on improving classroom instruction through high-quality instructional strategies and aligned instructional materials.

- They **redesigned** professional development for instructional staff by ensuring that it is aligned with district goals and curricula and is reinforced by on-site work with coaches and mentors.

- They **reinforced** achievement for struggling students by providing extended learning time and summer school and intensive services for limited English proficient students.

- They **retooled** their technology to better support teaching and learning by developing and supporting an accessible, web-based system containing rich student assessment data.

By adopting these core strategies School District C has taken strides toward meeting their goals for student achievement. However, even as they close their achievement gap with other districts performance expectations will rise again as the state's Uniform Bar Goals are stepped up in 2007-08. In order to continue to make progress the district will require additional resources to provide more comprehensive pre-school and all-day kindergarten programs, to pay for school-based coaches in the core subjects of reading, mathematics and science for all schools, and to hire certified teacher tutors to work with struggling students.

DISTRICT D CASE STUDY

School District D is a rural school district in upper northwest Washington serving just less than 2,000 students. The district organizes itself with three elementary schools, one middle school, and one high school. Surrounded by an agriculturally-based community, District D schools rely on high local levies based on low property valuation. Even with this constant funding challenge, the district focuses its tight budget on improving teaching and learning with the highest quality professional development and instructional support available. About half of District D students receive free or reduced-price meals, approximately three quarters are white, one tenth are transitional bilingual students, and eight percent are considered part of a migrant population. This short vignette, based on interviews with the superintendent, assistant superintendent, and four principals, conveys a successful school improvement process, especially in reading.

In the last five years, student reading scores on the Washington Assessment of Student Learning (WASL) have steadily risen in fourth, seventh, and tenth grades. Fourth grade students' scores increased from 75 to 83 percent of students meeting the standard, seventh grade students' scores rose from 54 to 67 percent, and tenth grade students' score improved from 67 to 74 percent of students meeting the standard. Nooksack Elementary school has increased its scores the most dramatically in the past five years, and has been deemed a Blue Ribbon school by the U.S. Department of Education for their progress. From 2001 – 2005, Nooksack Elementary fourth grade student's scores increased from 68 to 95 percent meeting the reading standard, 59 to 88 percent meeting the math standard, and 60 to 93 percent meeting the writing standard on the WASL.

CULTURAL CHANGE SUPPORTED BY INSTRUCTIONAL LEADERSHIP

School District D's mission is to "Ensure the Success of All Students," which is defined as all students graduate for high school prepared for college, work and citizenship. Instruction is considered the key variable to student success. The school board sets goals based on current status, district administrators ask principals about the instruction taking place in their buildings, and they create a plan of action with corresponding supports. Therefore, improving practice is a team-oriented, district-wide effort with priority given to providing support so that instruction is the most effective in every classroom.

With the fiscal backing of a Gates grant of $200,000 per year for five years, the district began its improvement process by defining what good instruction is and applying it as the basis for professional development. They always went to the best external experts and explored together what curriculum, instruction, and assessment would best support student learning. Individual schools studied high performing districts, schools and classrooms. Everyone is involved, so when they make a final decision, they are almost all on board.

Leadership Capacity Building. Administrators attended Harvard education trainings twice for professional development, with additional release time to develop school improvement plans, buy books, attend conferences, and network with other schools. With help from University of California-Santa Cruz, administrators wrote leadership standards *before* teacher standards. They modeled themselves as learners too. Teachers then helped write their own standards and started holding themselves accountable. Another key to District D's success is that the leadership team is stable. The superintendent has been with the district for 18 years, the assistant superintendent 13 years, elementary principals for 13, 10 and 9 years, the middle school principal for 6 years, and the high school principal for 4 years, showing that leadership turnover is not a prerequisite for dramatically changing the direction of a school district.

District administrator leaders ask principals: "tell me what you've done in the last two weeks to improve teaching and learning." Then they set administrative team goals together. Principals have autonomy to implement strategies, and extend the capacity building by developing teacher leaders. Principals model being learners, holding people accountable and teachers hold each other accountable. Principals make sure teachers have what they need (e.g. time, resources) and support them in it. For example, before the current initiatives, art, music, and physical education were a way to build in planning time, but now teachers say it would be helpful if students were working on problem solving and technology during that time.

Focus on Improving Teaching and Learning.

First, District D focused instructional improvement on literacy, and it is pretty aligned. A $100,000 grant from the state and the Gates grant helped to propel literacy work forward. They focused on an inquiry- and project-based approach with assessment tools to match. They aligned their curriculum and instruction with state content standards, the Essential Academic Learning Requirements (EALRs), and the corresponding Grade Level Expectations (GLEs).

Then the district began to address mathematics. This is the third year of the state-funded NO LIMIT! grant which has helped "to develop classroom models where students in grades 5-9 are engaged in activities that lead to a deeper understanding of mathematical concepts and improvement in mathematics achievement. This will be accomplished through the development of professional learning communities at the building level that focus on effective mathematics instruction and integration of appropriate technology."

The elementary schools began by focusing on adult learning based on the belief that what really matters is the instructional practice of a quality teacher in every classroom. They studied and developed beliefs around the fact that all students can learn, recognized it as their responsibility to get the students there, and refused to make excuses for their students or themselves. Staff developed a clear focus for what students need to learn, guided by the GLEs. Students are put on a chart if they are not up to grade level

and the students' names can move if they improve; if taken off chart, they celebrate. Time for teachers is blocked for collaboration; Good partnerships can move teaching techniques and they decided to create blocks of time for instruction and for preparation. Staff developed strategies for in-depth comprehension, attended summer institutes as grade level groups, attended "Critical Friends" training to help develop Professional Learning Communities, instituted peer observation and videotaping of lessons, created book studies, and worked with district-level consultants.

The middle school started with people ready to change and built a critical mass. Together they set three school-level instructional initiatives: base all instruction on active learning; create performance based assessments; and differentiate instruction. Next, the middle school staff reading task force wrote a literacy guide with the help of a consultant from the Center for Educational Leadership, University of Washington. Then they aligned assessments with state standards and benchmarks. Staff received training in and implemented differentiated instruction in their classrooms. They also committed to teaching 90 minute classes in math and reading every day. Teachers are supported by an instructional literacy coach, and five sessions with a math coach. Hopefully, they will have their literacy consultant for one more year and plan to have master teachers continue it.

The high school's theory of action parallels the other schools: instruction is the key to student achievement. Therefore, all professional development focuses on instruction. As part of the School Improvement Plan Technical Assistance Project (SIPTAP), they developed a school improvement plan, focused on literacy, and focused on six goals: reading, writing math, rigor, relevance, and relationships all measured by WASL percentages. Nine characteristics of high performing schools (from the state) guided their development of guided principles and a purpose statement. Staff gathered data for each of nine characteristics, teachers voted on data they would like to examine and administrators added to it. Staff collected strengths, concerns, "need to knows," and based on that, developed leadership themes. Their goal areas include: demographics, post high school education, student achievement, and student engagement. Next they developed six school improvement goals with drivers and barriers identified for each of six goals. They developed study teams, modeled lessons for readers/writers workshop, and instituted peer observation. They supported their efforts with a residency teacher and an instructional coach. Though they have made great headway, secondary teachers have changed their instructional strategies at a slower rate than the elementary and middle school staff, and their lower test scores provide evidence for the need to ramp up their improvement efforts.

Early Childhood.

Even Start ($150,000), Head Start ($100,000), and federal special education preschool money funds the Birth to 5 program. The Center for Families and Children began in Community D 11 years ago (1995) as a collaboration with many community partners in a center based model for "at risk" children (low income, low educational levels of parents, ESL, and special needs). Chief among those partners is Head Start, Even Start, and

special education. Whatcom Community College (WCC) also partnered as part of the family literacy program through Even Start. WCC provides instructors for adult ESL, Adult Basic Education and parenting classes. Families were also linked to multiple community resources. The mission was to support the development of healthy literate families so that all children would experience success in school. This was an intervention model, not an enrichment model. After a few years, the administrators in the district noticed that children who participated in the preschool were more ready for kindergarten academically, socially, emotionally and behaviorally than those who did not have this preschool experience. It was particularly evident with ELL learners.

Now the vision is a school-based preschool program in each individual elementary school's attendance area. Principals make it a priority to connect with students and families earlier in life. Kindergarten teachers want closer relationships and access to preschool teachers. All staff recognize that parent partnerships and early intervention boost their students' achievement. It is also easier to involve preschool staff in staff development. (Preschool staff has been doing literacy training with K-5 grades for three years and will do math training with grades K-5 next year.) *This year 16 of 40 "graduating" preschool students entering Kindergarten next year have already met ALL of the fall benchmarks for kindergarten. Twenty-four of 40 "graduating" preschool students entering Kindergarten next year have already met 90% of the fall benchmarks for kindergarten.* Longitudinal data has been kept for eight years on these kids as they progress through the system. Though analyses of this data is not complete, it is amazing how they seem to continue to progress.

Professional Development.

Professional development starts every year with looking at results, identifying achievement gaps and deciding how to move from there. A $15,000 grant helped fund capacity building efforts. The administrator leaders sat in on *all* content sessions to reinforce their importance. It is process and content together, not just Professional Learning Communities without content for learning. Principals make sure late arrivals are coordinated with school and district goals, and individual goals are connected as well. They worked with Michele Pola from Annenberg and honed in on "Critical Friends" protocols. Every administrator and teacher leader has common planning time fostered by protocols that serve as processes for adult learning. The district Gates coach helped streamline and run effective meetings, and teachers used the same protocols in classrooms. Key strategies for professional development have included: external consultants who model effective leadership and instructional practice, followed by the gradual release of responsibility (e.g. see, practice, release and do). Then they developed internal experts called "studio teachers," who took leadership roles in their schools.

The district provides eleven early release and arrival time for teacher collaboration. With one of the highest percentages of district controlled of optional professional development days, they direct 19 out of a total 60 hours. However, they did not give release days until there was content on which to focus. District curriculum committees were established where grade levels get together on a district level. School-

level study groups meet on curriculum and instruction, assessment, and differentiated instruction. Administrator and staff meetings are *not* "nuts and bolts;" they are learning meetings.

Strategies for Struggling Students.

At the elementary schools, they provide second through fifth grade students three seven-week blocks of an extended day program for an hour and 15 minutes after school three days per week. They provide summer school for at-risk students during four weeks of a half day program. Instructional aides are also provided to assist all English language learner (ELL) students, while some elementary schools also have an ESL teacher.

At the middle school, a 21st Century Grant funds an extended day program for 3 days per week, 1 ½ hours at a time, with middle school students who are not meeting standards. The ESL teacher serves 30 students with a "newcomers' group" at the beginning of day for 1 ½ hours if students are low on the test. Then rest of day she supports teachers in classrooms, meets with teachers, and provides after school pre-teaching. They also cluster students so that teachers have either ELL or special education students with their regular education students.

At the high school, two part-time teachers provide services to ELL students. They also offer tutorials for an hour before and after school that is supervised by a paraprofessional. Summer school provides a fee-based credit recovery program using Novanet for 2 hours a day during four weeks.

Technology

The Gates grant allowed the district to get the student to computer ratio down to 3.8:1 district-wide. They need to spend $100,000 per year, but this past year they did not spend any money district wide. A database which houses all district data allows for disaggregation. At one of the elementary schools, the equipment they have is old and unreliable. The T1 line is extremely slow. It is a huge frustration because they know kids need it in order to participate in modern life. New technology starts at the high school, and then other schools get "new to us." There is one information technology person for the entire district and is housed at district. At the middle school, the Technology Learning Project (TLP) helps integrate technology in the classroom, and 90 percent of teachers trained. The do not have a computer lab, but each pair of teachers have at least eight computers. Students use the Algebra Carnegie Curriculum, and technology-based assessments. The high school is using Carnegie Math, which is technology-based, but they need to integrate technology into their literacy program.

LESSONS LEARNED

School District D has consistently performed above predicted levels according to their student demographics over the past five years by improving teaching and learning in

a focused and informed way. They are guided by the following core strategies (adapted from their leadership standards):

- They **recalibrated** their goals for student learning by creating an understanding and urgency around improving *all* students' learning. Further, the district created well defined performance standards and assessments for student work at all grade levels.

- They **re-engineered** their school by ensuring the purpose of all administrator and teacher meetings are to improve instruction.

- They **redesigned** professional development for staff by ensuring that it is primarily on-site, intensive, collaborative, job embedded, and is designed and led by educators who model best teaching and learning practices.

- They **reinforced** achievement for struggling students by providing extended day and summer school for at-risk and low achieving students, and assigning ESL teachers and aides to bilingual students.

- They **retooled** their technology at the middle school where the Technology Learning Project (TLP) helps integrate technology in the classroom, with 90 percent of teachers trained.

By implementing these core strategies, District D staff and students have improved instructional practice and raised student achievement, especially in reading. Although this district has made progress, it needs to support more students in meeting the standards, and show similar improvements in all the core subject areas and at the elementary, middle and high school levels. In order to improve *all* students' learning in all classes, they will need additional resources, as they have just about exhausted the potential for reallocating existing revenues and basing large scale improvement on grant funding.

DISTRICT E CASE STUDY

BACKGROUND

School District E is a smaller district that, despite serving a growing community, has seen considerable declines in its student population. In the recent nine years the district lost approximately 800 students. With the loss of students comes the loss of funding from the state. The superintendent explained that the first year he took the position five years ago, he was required to cut $600,000 from the district budget. The district has already closed one school building and expects to close up to two more schools in the next year. In the 2005-06 school year the district operated five elementary, two middle, and one high school that collectively served 4,051 students. In addition, the school operates three alternative programs with modest enrollments (211 students combined). Industry in the region is rather limited and many of the families with school aged children are lower income. Approximately 38 percent of the district's student body receives free or reduced price lunch. While the school district serves a predominately white student population (84 percent), Native American students are of notable size in the district at approximately 8.5 percent of the student population. District E is an example of a district with decentralized decision making but strong centralized support for schools. This district has worked very hard to not only meet the new expectations set by state standards but to reorganize in a way that that will work best in its ever changing district.

TEST SCORES

Student performance in District E for the last five years has met or exceeded the average state WASL performance in both reading and math in grades 4, 7, and 10. In the elementary and middle grades reading performance has shown steady increases. In the 2000-01 school year, 72. 4 percent, 47.8 percent and 70.5 percent of 4th, 7th and 10th grade students, respectively, met state standards in reading. In the 2004-05 school year 87.2 percent, 74.0 percent, and 71.0 percent of students in 4th 7th and 10th grade met state standards in reading. While student performance in math showed early improvement, the percent of students meeting standards in math declined in both the 4th and 10th grade between the 2003-04 and 2004-05 school years. In the 2000-01 school year, 72.4 percent, 32.7 percent and 50.7 percent of 4th, 7th and 10th grade students, respectively, met state standards in math. In the 2004-05 school year, 67.6 percent, 55.6 percent, and 45.8 percent of students in 4th 7th and 10th grade met state standards in reading. The district has recognized this change and has turned its attention to math curriculum and instruction in the district.

STARTING THE REFORM EFFORT

District E, using a $2.7 million five year innovation grant from the Gates Foundation, began to rethink its organization and practice five years ago. Since receiving the award the district has developed an improvement strategy that emphasizes (1) *alignment of curriculum and instruction to the standards* (2) *strong professional community focused on state standards*, (3) *data-driven and research-based decisions*, (4) *highly trained staff*

and administration, and (5) *personal connections with students*. The district arrived at these five key points of reform through a process that included all of the district's professional staff.

In keeping with its tradition of site-based decisions with strong central support for schools, the district allocated money to each school building to develop an improvement plan. The district reviewed all plans and then folded them into a School Improvement Plan for the district. One of the most valuable uses for the grant money was to provide school buildings funding to extend teacher planning time. Most notably, this funding supported double planning periods for high school faculty, who used the time to rethink curriculum, instruction, and the school's organizational structure. (The double blocked planning period has been suspended but the superintendent is currently seeking funding to reinstate the planning time.)

While the Gates Foundation has put its weight behind small learning communities, the district felt that they wanted the organization of schools to be something that flowed naturally from the work being done in their schools. They didn't want to use a prescribed structure. Therefore, they did not immediately reorganize to small learning communities. Instead, they choose to build small learning communities in the schools and have students grow up in them. The bulk of the re-organizing work occurred in the high school and to a somewhat lesser extent in the middle schools.

While the Gates grant has been a great benefit to the district in providing resources, particularly funding for extra planning time, the grant is approaching its end and the district is very concerned about the prospects for sustaining its improvements. Their concerns with sustainability stem from the fact that they no long have the resources to fund all of the planning time they had, persistent attrition of staff to retirement, many new teachers who have not been involved in the reform over the last five years, and maintaining teacher commitment.

KEY ELEMENTS OF THE REFORM PROCESS

As state above the key elements of the reform in District E include (1) *alignment of curriculum and instruction to the standards* (2) *strong professional community focused on state standards*, (3) *data-driven and research-based decisions*, (4) *highly trained staff and administration*, and (5) *personal connections with students*. These elements were not only articulated by central administration but also in each of the schools we visited and clearly drive the work in the school district.

Alignment to the standards

Central office administrators explained that alignment of the "written, taught, and tested curriculum" with the state standards was central to the work of their schools. The district has embarked on system-wide curriculum "calendaring" to sequence the curriculum and provide a curriculum guide for all teachers. While the district has largely resisted

requiring specific instructional programs and texts, they have recommended that elementary programs use Everyday Math and have recently required that all elementary programs use a common science package. The high school, with the support of the Gates grant, engaged in a school-wide curriculum review and developed a common instructional model to be used across the school. Finally, the district developed formative assessments that aligned to the district's curriculum and standards.

Strong professional community focused on state standards,

The district administration and school administrators we spoke with emphasized the professional community of educators and collaborative decision making that occurs across the district. This professional community approach is no more evident than in the annual planning process, which underlies the work of schools each year. The process begins during the summer with the central office staff and building principals reviewing school data and establishing the district's objectives for the up-coming year. Schools then consider the district objectives in light of their own data and develop an action plan based on their own needs with regard to the objectives. The district then responds to the objectives and outlines a plan by which they will provide support and assistance that will enable schools to accomplish their annual goals. Through this iterative planning process the district engages every principal and teacher in planning for their future.

The district further encourages regular collaboration and professional community by enabling early release or late start days that provides 1.5 hours of collaborative time in buildings each week. In addition, teachers have participated in the development of formative assessments.

Data-driven and research based decisions,

The district, though providing school buildings with wide discretion to determine its own needs, insists that all decision be informed by data and research. To that end, the district has brought in a consultant to train principals and central administration on a decision process that involves continuous assessment and feedback. Each year the district administers benchmark assessments in math, reading, and writing in the 6^{th} and 8^{th} grades. In addition, teachers use classroom based assessments in social studies. Teachers not only receive feedback from the formative assessments but schools also receive analysis of their students' WASL performance in reports prepared by a consulting firm hired by the district. This achievement data, combined with results from the climate survey – which is based on what is known about climates of effective schools – form the basis of information used by the school to develop its annual improvement and action plan.

The district hopes to further its ability to analyze and provide data with a "standards based report card." This report card will track each student's assessment and classroom history and be forwarded to the student's next teacher prior to the school year. In addition, the district would like to develop internal capacity to analyze data, particularly

their formative assessments. At present they do not have the resources to analyze data internally.

Where local data cannot inform decisions, the district turns to research. The superintendent explained that they emphasize allocating resources toward research-proven practice. Examples of programs informed by research include full-day Kindergarten for the neediest students (with the hope to expand the program after the next school consolidation) and creating time for teacher collaboration around curriculum and practice.

Highly trained staff and administration

Professional development of not only teachers but also administration is an essential component of the district's improvement efforts because the district provides schools' staff with considerable flexibility in determining the school's direction and action plan. Time for professional development includes 13 additional contract days (nine of which are determined by teachers independently, three are at the discretion of schools, and one is to be devoted to technology), five waiver days (two of which are earmarked for conferences, two for analysis of assessment and student work, and one for record keeping), and Learning Improvement Days (LIDs) which are used for district-wide professional development (this year's focus was science education). The schools in the district generally use their discretionary time to enable early release or late start, which when combined with daily planning time for teachers allows for 1.5 hours of collaboration each week.

Schools must carefully consider their professional development needs and the district then outlines how the central office will assist schools as they strive to meet these needs. We learned at the schools that professional development of teachers is primarily coordinated for teacher teams instead of school-wide. Focusing on teacher teams reinforces the collaboration and cooperation of teacher teams in the schools. The central administration coordinates district-wide professional development for teachers that is largely focused on the vertical alignment of curriculum and practice. The district would like to develop a program with teacher coaches but they must complete negotiations with the union regarding this issue as such a program will remove some teachers from the classroom and have implications for class size.

The training of principals is taken very seriously at District E. Principals meet with the central administration for two hours each week and attend summer and winter institutes. Principal institutes and meetings focus on the theme for the year (developing student and teacher learning community). Principals are also trained to conduct teacher observations and provide teachers with feedback. Finally, each principals serves on a committee charged with discussing district-wide instructional issues.

Personal connections with students

As the district has considered its curriculum, instruction, school organization, and directions for the future, they have always maintained interest in providing students with an environment strengthened by close connections. In addition to modeling community with its teachers, the schools have strived to "know students and their work well and create structures that support both the student and the system." This effort has led to small learning communities in the middle and high schools.

CONCLUSION: LESSONS LEARNED

District E has confronted the changes to their district with a thoughtful effort to align with standards and expand the scope of decision making in the district.

- They have *recalibrated goals for student learning* with a district-wide effort to align curriculum to state standards.
- They have restructured teachers' time in schools, which has allowed them to *redesign teacher and administrator development* to not only increase skills but also expand the involvement of teachers and principals in decision-making.
- They have reinforced achievement with benchmark assessment and a consistent district-wide commitment to data-driven decision making.
- Finally, they have pursued schools with more personal connections by *re-engineering their secondary programs* into small learning communities.

The district has benefited greatly from a Gates Foundation grant but this grant is due to expire soon. To sustain the reforms they have already made, they are currently searching for ways to fund initiatives such as teacher coaches, internal data assessment, and double blocked planning periods for high school teachers.

DISTRICT F CASE STUDY

School District F, a small rural school district with one K-12 school, serves approximately 240 students. The eastern Washington school resides in a small town of less than 1,000 people with a largely agricultural economic base. The highly mobile (30 percent) student population consists of mostly (92 percent) white students, approximately half of whom receive free or reduced-price lunch. In the past five years, the students and school staff have undertaken an extremely successful campaign to improve teaching and learning. This short vignette, based on interviews with the superintendent and principal, conveys the instructional vision that drove the increase in student performance, and identifies the strategies instrumental in reaching their sustained results.

Before delving into the successful strategies that this school district employed, we highlight performance results their strategies produced, which provides the big picture of where they started and how far they traveled. From 2001 to 2005, reading scores on the Washington Assessment of Student Learning (WASL) increased from 68 to 100 percent of fourth grade students meeting the standard, and from 32 to 94 percent of seventh grade students meeting the standard. From 2003 to 2005, tenth grade students reading scores on the WASL increased from 63 to 100 percent meeting the standards. Writing scores on the WASL also increased from 2001 to 2005 with fourth grade scores starting at 39 percent and increasing to 70 percent, seventh grade scores rising from 55 to 67 percent, and tenth grade scores growing from 58 to 79 percent of students meeting the standard. Similarly, over the same five year period, math scores on the WASL increased from 43 to 85 percent in fourth grade, 36 to 67 percent in seventh grade, and 58 to 74 percent meeting the standard in tenth grade.

Cultural Change Supported by Instructional Leadership

For the past five years, cultural change has driven District F staff and students from a norm of mediocrity to an expectation of excellence. Staff developed a shared mission and vision for themselves and their students that culminated in a living document in which they pledged to:

PARTNER with parents
PROVIDE a safe learning environment
EDUCATE all students, and
EMPOWER them to make correct choices.

This change process was ignited and supported by administrator leaders who knew the research on what works, envisioned how to create change, sold the process, acted as change agents, and helped staff get past their resistance. During the first of the five years, they made the mistake of trying to skip the step of getting people on board and implementing change through administrative direction. They then realized that the staff needed to build ownership together and have more of a role in directing the process. A lot of the success is due to teachers' increased leadership role, professional development, and common focus backed by hard work. As the administration took less of a lead, the

teachers were given more and more autonomy, and built up their own leadership skills towards decentralized leadership. The improvement process began with a centrally-initiated vision, yet has been implemented from the bottom-up.

Relationships among colleagues and with students became a priority and resulted in a culture of teacher collaboration and connections with students. Staff carved out an hour and half during two days per month for collaborative planning when they discussed how to do better in content strands where they were weak. Then they focused collaboration on improving instruction. Informal evidence of this change is that staff room conversations moved away from non-instructional complaints about students into instructional brainstorming on solutions for improving student learning. For example, a cultural expectation to increase instructional time permeates the school, and when some teachers consistently finished teaching 10 minutes early, others helped them get better at using every minute of instructional time. They could have been weaker in another culture, but at this school they have to try.

Teachers have taken more responsibility for student learning. Teachers tell students they have to come in for help, which is a cultural shift. Secondary teachers are now teaching students instead of just content and kids respond to this caring. They greet every student coming into classrooms, wanting every student to be touched everyday. Students were surprised at first, but noticed when a teacher missed connecting with them. The fights, weapons, and drugs that were previously a problem in the school have ceased and now students are excelling not only in academics but in extra curricular activities such as band and FFA in which they have won competitions. District F staff created a more academic feel for the students. For example, they mirror a college schedule in the secondary grades with semester finals only two per day and let the students come in late.

Focus on Improving Teaching and Learning

District F school staff committed themselves to implement best practice and research-based strategies. They started by looking at WASL scores, established a baseline and used it as a reference point to grow from. For the first few years, they focused on broad areas, and now they analyze the data by strands (student, class, etc.). From the test score data, they set goals in math, reading and writing. Collaboration time is focused on these goals, and enhanced with in-house experts.

They also started selecting curriculum that matched the state content standards, the Essential Academic Learning Requirements (EALRs), and the corresponding Grade Level Expectations (GLEs). Teachers started talking about what they were each teaching, and they started the curriculum mapping process. They wanted to make sure they were teaching with purpose. Essentially, they need to know that students can read and write well, and be able to think analytically. They pulled resources from other districts.

For the first three to four years, the content focus of the improvement effort was in reading in the elementary and then reading in the middle school. After accepting the

concept that every teacher is a reading teacher, they incorporated writing and are starting to consider every teacher a writing teacher. The last two years, there has been a strong focus on math with an emphasis on teacher in-service and training. Most students (approximately 90 percent) take algebra by the end of *eighth grade*, and about 30 percent of students take calculus in twelfth grade. Now they are concentrating on improving science instruction.

They also realized that they could make a lot more headway if they intervened earlier in their students' lives. They have had a quality pre-school program for 15 years, but in the last five years they switched the content to a rigorous kindergarten readiness program. They also target children from families with low incomes. It took a couple of years to see results, and now almost all of the delayed kids have caught up to grade level and the average kids are up to one to one and a half years ahead when they enter kindergarten. *By the end of kindergarten, approximately 95 percent of students can read.*

Professional Development

Instructional improvement takes an enormous amount of professional development. One of the budgetary decisions that District F staff made was to make professional development a priority by providing almost unlimited resources for training. They cut back on maintenance, food service, and secretarial staffing to fund ongoing professional development at a high level. They attend workshops, work together to become familiar with the WASL, schedule time together to work on how they can improve in targeted content areas, and build teacher leaders. The state pays for two Learning Improvement Days (LID) per teacher per year, but since District F is a small district they cannot afford additional days. (Larger district have 10-15 days paid by local levy dollars.) The LID days take place before school starts and are led by school and district administration. The district does provide teachers with one and a half hour early release days every other week. Informally, teachers constantly collaborate. They would like and could use more professional development days.

Strategies for Struggling Students

District F staff identified struggling students and decided what they would do to help support their learning. Their elementary strategies include identifying students early, prioritizing resources for grades K-3, and breaking the elementary grades into smaller groups for instruction. They utilize paraprofessionals by treating and training them like teachers and give them the same level of professional development. They break down instruction into small groups of five students for literacy and staff them with trained paraprofessionals. There is an administrative mandate barring paraprofessionals to be used for hanging bulletin boards, and it is enforced.

The intervention strategies are based on a three-tier model. The first tier is the teacher instructing all students from a common curriculum. The second tier concentrates on small groups of one to five students who are given a second dose of the content. The third tier is largely one-on-one with an aide all day long.

Extended day help includes one half hour before school and one half hour after school. During both of these times, teachers are available to help students, primarily via one-to-one tutoring. The after school program is required for students with poor grades. K-8 summer school is fairly limited to students who are at risk of regressing during the summer months.

Technology

School District F had a lot of technology training a few years ago. For two summers in a row, a grant paid for all the teachers in the county to learn the basics and then how to integrate technology into the classroom. The school houses three full computer labs and five to seven computers in every classroom, with everything networked. Software is currently utilized in the classroom, especially for assessment purposes. Unfortunately, because of budgetary limitations, they do not have a replacement cycle.

Lessons Learned.

School District F has beaten the odds over the past five years by improving teaching and learning in a focused and informed way.

- They **recalibrated** their goals for student learning by setting student performance goals based on WASL data.
- They **re-engineered** their school by changing the focus to improving student learning, and assigned their time and fiscal resources accordingly.
- They **redesigned** professional development for staff by providing almost unlimited resources for training and collaboration.
- They **reinforced** achievement for struggling students by identifying struggling students early, reducing reading class sizes in the elementary grades, providing extended day learning opportunities, and implementing a three-tier intervention model.
- They **retooled** their technology by integrating technology into the classroom and utilizing assessment tools to inform instruction.

By implementing these core strategies, District F staff and students successfully changed their culture to embrace and support excellence in teaching and learning. Although this district has made progress, it needs to make even more progress and show similar improvements in all the core subject areas and at the elementary, middle and high school levels. For this, they will need additional resources, as they have pretty much exhausted potential for reallocating existing revenues and basing large scale improvement on grant funding.

DISTRICT G CASE STUDY

District G is an urban district in eastern Washington. The city of District G, is working itself out of economic recession and has seen labor market and wage growth in the past few years. Four-fifths of the students in the district are white, about half receive free or reduced-price meals, and one-third move to a new school each year. Since 2001, the district has taken an aggressive role in increasing student performance, and the success shows in steadily rising student test scores, especially at the elementary and intermediate levels. This short vignette, based on interviews with the superintendent, a district curriculum director, two elementary school principals, and an instructional coach, conveys the instructional vision and effective strategies employed by district and elementary school staff that has resulted in sustained student learning gains.

Prior to examining the details of the change process, a look at the test scores provides an overview of where the district's elementary schools started from and how far they were able to bring student learning. From 2001-2005, fourth grade students' reading scores on the Washington Assessment of Student Learning (WASL) increased from 68 to 84 percent, math scores improved from 48 to 65 percent, and writing scores rose from 45 to 63 percent. Test scores at the two elementary schools studied grew even more than the district gains, and are highlighted separately in the case study descriptions below.

SYSTEMIC DISTRICT-DRIVEN INSTRUCTIONAL VISION

In 2001, the current superintendent came to District G, which had recently began an initiative to focus on instruction, and he led an effort to make sure staff knew what it takes for *every* child to meet rigorous standards. The Strategic Leadership Group, comprised of union members, school board members, and administrators worked with their Gates grant coach to develop a new strategic plan that followed already established school improvement plans. They created a stretch goal of 90 percent of students meeting standards in reading and math in 4^{th}, 7^{th}, and 10^{th} grades as measured by the WASL by 2007, which in turn created a conversation of urgency. Then district data staff put together the data, and they used 2002 data as the benchmark. In 2004, they created a strategic plan which included:

1. Exit system with choices,
2. Align internal resources to achieve goal #1, and
3. Engage the public to understand goals #1 and #2.

Each of those goals has measurements attached. From those goals, they created a district elementary curriculum guide with time constraints because of high mobility rates. The curriculum was aligned with state content standards, the Essential Academic Learning Requirements (EALRs), and the corresponding Grade Level Expectations (GLEs). The school board adopted the policy that expects district curriculum to be taught. The district collected data from schools after each unit was taught, which was resisted at first because of the change in pacing and the individual preferences of what teachers wanted to teach.

Then staff concentrated on developing skills to teach the curriculum effectively. District staff conducted walk-throughs where they would look for:

CONTENT relevant and connected to real life,
CONTEXT in which evaluated,
COGNITIVE LEVEL of demand, and
ENGAGEMENT.

This strategy is not evaluative, but instead is a monitoring tool that fosters a culture of learning by looking at practice and monitoring work.

They also changed principal meetings into professional development meetings, during which they examined curriculum alignment and data, and infused conversations about race. The district leaders helped shift principals from managers to instructional leaders. They reassigned administrators so they could help implement change and also get more experience in order to build future district leaders.

In the schools, the district implemented collaboration time for one hour per week among school staff to meet both horizontally and vertically. After a self-study with the facilitator model, they decided instead on an instructional coaching model and funded approximately 180 throughout the district. The district also bought back class size reduction to reduce class size by one student per class.

SUCCESSFUL IMPLEMENTATION OF THE INSTRUCTIONAL VISION: SCHOOL 1 ELEMENTARY SCHOOL

School 1 and School 2 Elementary Schools benefited from the support that the district provided to their own school improvement processes. The principals first worked together at School 1, and the assistant principal became the principal at School 2, so their stories share many aspects. The key success element between these two principals is their strong roles as instructional leaders who practice distributed leadership (Spillane). From 2001-2005, School 1 Elementary fourth grade students' WASL reading scores increased from 71 to 90 percent, math scores grew from 40 to 82 percent, and writing scores progressed from 43 to 62 percent.

Instructional Leadership

In the fall of 1997, the principal at School 1 moved from the part-time assistant principal to the principal position. First, she initiated a school wide discipline plan. The idea was to get behavior under control so they could focus more on teaching and learning. This falls in line with the Bill & Melinda Gates Foundation's 3 Rs "rigor, relevance, and relationships" model in that they raised rigor after relationships were in place. The discipline plan also held teachers responsible for *all* kids, and placed the teacher in charge.

The second major change was that the staff started studying together and looking at curriculum. They shared ideas on what worked in their classroom. They attended conferences, workshops, and classes as long as they were willing to share when they came back. They studied poverty (Paine), and also a few teachers retired and were replaced by young teachers who were eager to learn. A key strategy was hiring people who shared their vision that *all children can learn to the best of their ability*.

Data-Driven Decision Making and Collaboration

The current work of school staff at School 1 is based on a coaching model. First it was implemented in primary literacy, then math for grades K-6, and finally intermediate literacy and math. The coaches and principal work on professional development together and take ideas to the school's Distributed Leadership Team (DLT), which is a carryover from the Gates grant. They analyze student work and test data to figure out what professional development would work best. They take ideas to the DLT. Each grade level decides who will be represented on the DLT and teachers voluntarily come to two extra meetings per month. They hash out what they think should be done and draft a decision and take it back to their constituents so that all staff are involved. Voices are all heard and agree not to sabotage the decision if they do not agree. The professional coaching model is phased in through four levels of commitment: all, many, some, and few. Though, the principal insists a certain buy-in for all.

Professional Learning.

School 1 staff also started looking at student work together, processing it at grade levels and developed a plan. For example, Learning Improvement Days (LIDs) were used to study student writing. Specialist and instructional aides were the recorders in the groups. The district testing and evaluation team does so much of the data analyses work that principals have more time to make decisions with the data. School 1's DLT utilizes the data book he provides and decides which classrooms get Title I dollars and how to get the assessments up

Staff meetings used to be "nuts and bolts" once per week every Tuesday. In the second year of her principalship, the school moved to meeting from 8:10-8:50am twice per month and focused on professional development with the principal modeling. The workshop model involves presenting a mini-concept, processing at tables, then coming back and saying what they think about it. Now they have a reason to have a meeting. District collaboration became built in to the teacher contract. They have a late start on Thursdays when they have an hour for collaboration. The teachers' union said they would decide together how the time would be used to increase student achievement. School 1 started slowly and came up with a system that worked for them. It includes three out of four weeks where the teachers decide on what collaboration is about and they volunteer to be coordinator of a group, and other teachers then sign-up for the groups. Each group is responsible for reporting back to the principal through a form made by the DLT that shows how it ties into a school wide education plan. Then the fourth Thursday is whole group collaboration around whatever assessment data has shown to be the focus

(e.g. writing) and coaches deliver. The key strategies here include: *Involve as many decision makers as possible; Build teacher leaders.*

Early childhood.

Always a priority, the district's facilitator model started providing assistance for those teaching the youngest children about 10 years ago. School 1 has offered two half-time sessions of kindergarten for the past few years, along with two classrooms of K-1 students, where the kindergarten students go home at mid-day, leaving a small group of first graders for the afternoon. This accommodation helped students entering kindergarten from special education preschool to be working at grade level by the end of first grade. Next year, they are returning to the standard half day kindergarten with 4 sessions to reduce the kindergarten class sizes to 16 or less. The entire staff supports this effort to get their kindergarten students off to the best start possible.

Strategies for Struggling Students.

School 1 staff are dedicated to the workshop model throughout the school day, giving students 90 minute blocks of instruction for literacy and math. During the literacy block in first grade, the Reading Recovery teacher assists individual students and consequently often removes the need for special education. They provide many "looping" and "multi-age" classrooms, where students stay with the same teacher for two years. This has been so successful because the relationships are already established, so all can concentrate on academic progress. Teachers also tutor small groups of students before and after school, with payment through extracurricular contracts. Additionally, ELL tutors and an ELL teacher come to School 1 Elementary on a regular schedule to assist those students who are just learning English.

Technology Integration**.** Technology is an integral part of their professional development. The computer lab is used extensively for LIDs on skills and how to integrate technology into the classroom. The teachers also sign up for classes through the district. Gates grant money for the last five years paid for a technology lab with 28 computers. They purchased SuccessMaker® Enterprise through Pearson Digital Learning which is connected to the EALRs, research-based through Harvard, and problem-solving focused. Students use it twice per week for math with an optional third time on a classroom project.

ANOTHER SUCCESS CASE: SCHOOL 2 ELEMENTARY SCHOOL

In the fall of 2002, the current principal of School 2 Elementary came to the school from School 1 Elementary. School 2 staff had just submitted a school improvement plan (SIP), which was not accepted due to lack of clarity and intentionality related to the seven attributes of highly successful schools. During her first year at the school, the principal and teachers focused on how to conduct collaborative conversations focused on creating a shared vision. This involved intentional professional development in the skills necessary to create constructive dialogue around instruction and student

learning. Through further study, the staff came to consensus on what areas needed to be addressed in order to best meet the needs of ALL students. These identified needs were then included in the resubmitted SIP. This process created shared leadership where everyone planned and made decisions on how to spend the grant money, based on effective learning principles. The second year they purchased SuccessMaker®, planned professional development as a grade level or band, and instituted book studies for the whole school. They utilized thinking strategies across the curriculum, and created both a common language and common focus. They aligned staff development with best practice. In reading and writing, they provide for 90 minutes of uninterrupted instruction. In addition, each teacher is expected to provide a minimum of 60 minutes per day for math instruction and practice. At School 2 Elementary School, from 2001-2005, fourth graders' reading scores on the WASL rose from 71 to 83 percent, math scores increased from 61 to 70 percent, and writing scores improved from 63 to 70 percent.

Professional Learning

When teachers participated in professional development, it needed to be tied to school goals. If it was sufficiently related, the associated costs and time were provided for the participants. The common focus was so clear to all, that very few teachers ever approached the administration to participate in professional development that did not align with the school's plan. The building climate changed in that what had previously been a polite and caring group of co-workers grew into a focused, professional learning community for all. The quality of conversations has changed, and they have taken ownership of professional learning and the learning of kids. For example, all staff participate as teams in learning a new skill or strategy, observe lessons in action, and meet to collaborate and design lessons related to their new learning.

Assessment

They know what the expectations are at each grade level. Ongoing formative data every six weeks occurs in the primary grades and that is how students are placed in reading groups (K-6). They utilize an assessment wall, and every grade level collects data on every student four times during the year in reading and writing. (Math is not as frequent.) This assessment data determines how resources are allocated. They initially focused on instructional improvement in reading and reading comprehension adding writing in the last two years. Support needed to include writing, because not all high readers were equally competent writers. In math, they focused on problem solving activities and implemented math communities.

Strategies for Struggling Students

During literacy instruction, they work in teams to provide small learning groups. For students at greatest risk, they maintain a ratio of one staff member to no more than six students Assessments drive a six week rotation of flexible groups based on identified needs. The ideal would be an instructional coach at the primary and intermediate levels for reading and math along with sufficient certified staffing for every classroom to

reduce class size during critical literacy and math guided instruction and practice. Reading recovery is extremely important for the success of students who struggle with learning to read. There is extensive data to support the effectiveness of this model of teaching and professional development for those hardest to teach students.

Technology

With funding from their Gates grant, all intermediate teachers spent a week of training on integrating technology with curriculum .Teachers each received four computers, and cameras projectors as well as facilities enhancements for their classrooms. The district and the building jointly provided training and technology through a program entitled Building Leadership through Technology (BLT). They collect achievement data and generate graphs, charts, and data walls in order to communicate how well students are performing and in turn to determine how effective instruction is. The book room is being bar coded to ease check-out and staff access to inventory from classroom computers.

Lessons Learned

There is an undisputable relationship between adequate, focused financial resources and student achievement. They have successfully restructured the model of teaching, learning and targeted intervention to meet the needs of a very diverse population. Now they need to focus on a tiered intervention plan to capture the last ten percent of the most mobile and fragile learners. Math is now becoming the core content of greatest need, with the goal of 80 to 85 percent of our students meeting standard in the coming year. Again, greatest success will depend on adequate resources to provide for at least two coaches focusing on K-6 math and reading. There should be a minimum of one instructional coach in every building and additional availability should be based on size and need.

DISTRICT LESSONS LEARNED

District G administrators and school board members provided their schools with a systemic vision for instructional change. They established a good rapport wherein people feel valued and respected, yet they were not afraid to make necessary personnel changes to move their vision forward.

- They **recalibrated** their goals for student learning by creating a stretch goal of 90 percent of students meeting standards in reading and math in 4^{th}, 7^{th}, and 10^{th} grades as measured by the WASL by 2007.

- They **re-engineered** their schools by creating a culture of teacher and student learning based on data-based decisions that led to effective instructional practice and research-based strategies.

- They **redesigned** professional development for staff by involving as many decision makers as possible, building teacher leaders, and tying it to school goals. This has led to a climate change focusing instruction through which the quality of conversations has changed, and teachers have taken ownership of professional learning and student learning.

- They **reinforced** achievement for struggling students by providing intensive tutoring through Reading Recovery, providing intensive small group instruction for two to three weeks for the highest risk students, and providing uninterrupted 90 minute blocks for reading, writing, and math classes.

- They **retooled** their technology by utilizing the Gates grant to receive training on integrating technology with their curriculum, and continuing their expertise with participation in the district's Building Leadership through Technology (BLT) program. They also collect achievement data and generate graphs, charts, and data walls to communicate how well students are learning and how effective instruction is.

By implementing these core strategies, District G district and elementary school staff successfully implemented their instructional vision and dramatically improved student performance. Although this district has made progress, it has room to make even more progress and show similar improvements in all the core subject areas and at the elementary, middle and high school levels. In order to improve *all* students' learning in all classes, they will need additional resources, as they have virtually exhausted potential for reallocating existing revenues and basing large scale improvement on Gates grant funding.

DISTRICT H CASE STUDY

BACKGROUND ON THE SCHOOL DISTRICT

District H serves a rapidly growing community and has seen substantial increases in its student population over the last 10 years with growth expected to continue. The school district currently serves about 6,700 students with approximately 12 percent receiving free or reduced price lunch. District H provides a powerful example of a school district that through central coordination of professional activities has created a school district with wide consensus regarding instruction, professional practice, and engagement in the goal of continuous improvement.

TEST SCORES

District H is a high performing school district by the standards set in the WASL. District H students have consistently outperformed the state average in 4th, 7th, and 10th grade reading, math, and writing WASL tests. Over the last five years, 4th grade District H students have shown continuous gains that out-paced the state trends in all subjects. In 2000-01, 72.1 percent, 49.7 percent and 45.1 percent of 4th grade students scored proficient on the WASL for reading, math, and writing, respectively while 91.2 percent, 76.7 percent and 74.3 percent of 4th grade students scored proficient in 2005-05 on reading, math and writing exams, respectively. The district's 7th grade students showed gains that mirrored the state's average. In 2000-01, 49.0, 40.1 percent, and 61.2 percent of District H's 7th grade students scored proficient on WASL for reading, math, and writing, respectively, compared with 81.8 percent, 61.8 percent, and 78.5 percent scoring proficient in 2004-05 in reading, writing, and math, respectively. While the district's 10th grade students have posted gains in all subjects, the percent of students meeting standards in math and writing declined slightly between the 2003-04 school year and the 2004-05 school year. In 2000-01, 72.9 percent, 44.4 percent, and 58.3 percent of District H's 10th grade students scored proficient on the WASL for reading, math, and writing, respectively, while in 2004-05 86 percent, 59.3 percent, 81.1 percent of 10th grade students scored proficient in reading, math, and writing, respectively.

IMPROVEMENT IN DISTRICT H: A PROCESS FOR CONTINUOUS IMPROVEMENT

About 10 years ago the district began to rethink its work by developing a new "student profile." The student profile identified the knowledge and skills that the district and community would want to see in its graduates. With this image of the student in mind, the district began to rethink what it would need to do to develop a student with this profile. Since that time state standards have been folded into this vision. The rethinking of curriculum and instruction in the district began with the 18 early dismissal days, which the district used to look at instructional practice and needs. This general approach to improvement has evolved into an organized and strategic use of time, which emphasizes bringing teachers from across the buildings together to discuss issues and plan for the future. The basic premise behind the strategy is that by promoting reflection and making constructive conversations about student work commonplace, the district will become a

place of continuous improvement. Today the improvement strategy is built around active use of assessment, professional development for teachers and administrators, and relations with the bargaining unit.

KEY ELEMENTS OF THE DISTRICT H STRATEGY

The main components of District H's strategy for continuous improvement include (1) *teacher professional development*, (2) *regular assessment of students*, (3) *leadership development*, and more recently, (4) *developing a constructive relationship with the teachers' union*. While they initially focused attention on reading and writing, the district's curricular focus has expanded to include math and science as well and social studies to a somewhat lesser extent. As indicated above, the student profile provides the guiding vision for all improvement efforts in the district. As the district has honed the student profile, they have also established outcomes and indicators that let them know if their students are meeting their expectations. It is important to remember that each facet of the district's strategy for high performance is focused around the goals and outcomes laid out by the student profile. Nearly all of the planning and organization for the strategies described below are done by the district Teaching and Learning (T/L) office, which operates with only 3.6 FTE including the assistant superintendent, other administrators, and clerical support.

(1) *Teacher professional development* – The district views its teachers as the "experts" in their subject areas and relies on teachers for the development and implementation of high quality teaching and curriculum. As such, a central feature of professional development in the district is teachers creating a forum in which teachers are asked to collaborate in evaluations of assessments, curriculum, and student work.

The district currently operates with nine early release and 3 full waiver days. The central office retains primary control of this professional development time though they annually provide school buildings with a portion of this time to use at the building's discretion. The district teaching and learning office (T/L) organizes and leads nearly all of the district-run professional development. Interestingly, all professional development is aligned to state professional standards and teachers can earn "clock hours" free of charge to meet their professional development requirements and move up the pay schedule.

The major components of the teacher professional development are outlined below.

- <u>System-wide subject area planning</u> - A regular component of the professional development run by the district is system-wide subject area collaboration. Each subject area (language arts, reading, math, science, social studies, health/PE, arts, world languages) meets to develop a work plan and goals. The collaborative meetings are largely organized and facilitated by T/L administrators.

- Subject based summits –T/L convenes summits of about 15 representative teachers from across the system to focus on curriculum. The district determines curriculum and instructional material needs through the summits instead of relying on regular material adoption. Summit attendees determine if the curriculum materials are satisfactory. Summits are currently held for reading, writing, math, science, and arts. Since the district recently passed a levy for technology – something the district failed to do in several previous years, the district plans to do a technology summit beginning next year. At the summits, teachers meet in subject based groups twice a year for half of a day. Teachers are released from classes to attend and substitutes are provided.

- Scoring sessions – The district administers core assessments of progress in several subjects throughout the year (see "regular assessment of students" below). After the assessments are administered T/L convenes a team of teachers to review the assessment, identify the key skills and mastery tested on the assessment, review the scoring rubrics, and score the assessments. Results are returned immediately through scanning systems. The group then analyzes the data, identifies trends, gaps in performance, identifies students for targeted intervention (this is done more in the high schools), and makes plans for the next instructional period.

- Teacher evaluation – The evaluation of teachers is based on skills attainment and goals. Each teacher, in collaboration with her/his administrator, establishes annual goals and improvement areas. All teacher evaluation is based on their progress toward their goals and improvement efforts in each of the identified areas. By and large, the district feels this evaluation effort coupled with other professional activities has generated much more informal and formal collaboration among teachers.

- Building professional development – Annually the district allocates 35 hours of professional development to the school building to be used entirely at the building's discretion. Among the four schools we visited, these hours were largely used to facilitate building-level collaboration. While the principals generally indicated that they did not hold many full faculty meetings with this time, they did note that this time was used to bring together teams of teachers within the building to address specific concerns in the building. For example, the senior high school used this time to develop a school-wide strategy for intervention with its "at risk" students.

(2) *Regular assessment of students* – The district conducts assessments of progress in several subject areas multiple times a year. These assessments are in addition to the WASL exams. Data are collected system-wide but are broken down to the school and classroom levels. Teachers receive the results very quickly providing them with the opportunity to remedy any weaknesses in their students' performance. In addition, the assessments are integrated into a professional

development program as indicated above. The assessment schedule is outlined below.

District-wide Formative Assessments in District H

Subject	Grades	Number of assessments per year
Reading	3-8 and 10	1
Reading	9	2
Writing	K	1 – end of year
Writing	1-5 and 9	2
Writing	6-8 and 10	1
Math	1-5 and 9*	3
Science	5-10	2

*Additional secondary grades will be added next year

(3) *Leadership Development* - In response to concerns with the communication among teachers and administrators in the school buildings, the district began a professional development program for its administrators. This program, which is led by the superintendent, provides principals with knowledge and skills development that will help them communicate with their teachers about their needs and instruction. Principals meet for half a day once a month. The agenda for these meetings is largely determined by the superintendent with the support of a consultant who focuses on leadership. Both the superintendent and director of T/L see this is an extremely valuable component of their reform. As they explained together, they have very high expectations for their administrators so they are trying to provide them with all of the support they need to meet these expectations.

(4) More constructive relationship with bargaining unit – District H is trying to be more proactive in dealing with the union. The district regularly meets with its bargaining unit and has pulled the union leadership into some of the district wide decision making.

What is notably absent from the district-wide improvement strategy is any approach for direct student intervention or specific mention of efforts to reduce class size. The district does run a district-wide summer school program. By and large, however, direct interventions such as tutoring, after school programs, or targeting students within the classroom are determined at the school building to allow these programs to meet the specific needs of the students in the building. The four schools we visited each described specific interventions they had in place for students. The elementary schools made wide use of trained para-educators to provide additional support in the classroom and one-on-one support to targeted students. In the classroom, para-educators generally worked with the more advanced students freeing teachers to target a small group of struggling students. The senior high school had a smaller array of intervention services but, at the

time of our visit, the staff was in the process of developing an intervention system that outlined a process through which students should be identified for intervention and progress to stages of intervention. With regard to class size reduction, the superintendent indicated that they have used I-728 money to keep elementary class sizes to 20 in grades 1-3 and 25 in grades 4-5. He indicated that middle and especially high school class sizes are driven by schedules.

CONCLUSION: LESSONS LEARNED

District H exemplifies a professional community that is continuously engaged in discussions about students and student learning and is a valuable example of a district that made great progress by (1) *recalibrating goals for student learning,* (2) *redesigning teacher development*, and (3) *continuously reinforcing student achievement*. . The district's improvement process began 10 years ago with the district rethinking the ideal profile of a District H graduate and thereby recalibrating the district's goals. While this profile remains dynamic and subject to revision, all district staff have remained focused on this vision and the outcomes they have determined best reflect this vision. The primary means through which the district pursues their vision is by capturing the insights, knowledge, and experience of its professional staff – in particular its teachers and administrators – through collaborative activities that focus on curriculum, instruction, and student work. Since embarking on their improvement process, the district has designed a consistent and comprehensive approach to professional development and teacher engagement. Through regular assessment and evaluation the district constantly orients the conversation around student performance.

Time is the most valuable resources that allows the district to realize the benefit of setting goals, redesigning teacher development, and reinforcing student achievement. District H takes full advantage of the 9 half days and 3 waiver days it has to supplement the Learning Improvement Days (LIDs) provided in the state contract. The district further supplements professional time by paying for substitutes while selected teachers attend curriculum summits held by the district. Every administrator we spoke with remarked on the value gained by these professional days. No one would turn down more time for these professional activities. In addition to more time for teachers, the district would very much like to add additional positions to the T/L office. This office organizes and facilitates all district professional development meetings for teachers, supports the leadership development program, implements the assessment program and all follow-up work including data analysis, and assists schools with building level professional development with only 3.6 FTE. The district has already asked its board for additional FTE in this office.

While the district moves forward with great confidence in its efforts and approach, they have felt that they have underserved their students in the area of technology. They do hope that this can be changed now that they have passed a levy to raise funds for technology.

DISTRICT I CASE STUDY

District I is in a mid-sized city with a population of nearly 72,000. It serves as the regional center of a predominantly agricultural region located in south-central Washington. The region experienced rapid population growth between 1990 and 2000, growing by nearly a third during that period. District I's increasingly diverse student body of 14,290 reflects the demographic changes of the region. More than 64 percent of the district's students are ethnic minorities, mostly of Hispanic origin, and 72 percent qualify for the federal free- and reduced-price lunch program. Nearly a third of its students qualify for services for limited English language proficiency and 13 percent receive special education services. The district operates 14 elementary, 4 middle, and 2 high schools. It also operates an alternative school and provides the home base for the District I Valley Technical Skills Center.

District I is in the midst of a four-year improvement process, called the Roadmap to Success, which focuses on improving student performance in mathematics, reading and science on the Washington Assessment of Student Learning (WASL) state tests. This district vignette provides a brief overview of the district's vision and strategies for achieving the significant performance improvements it has realized over the past several years.

Although district performance on the WASL still trails state averages across grade levels and subject areas, District I has made far larger gains than the average district on nearly all of the state assessments over the past five years. In nearly all areas tested the district's gains were double or more of those of the state as a whole. In reading, the percentage of fourth graders meeting state standards increased by 57% compared to 20% statewide between 2000-01 and 2004-05. Seventh grade students made even greater gains, improving by 172% compared to 73% statewide during the same period of time. In mathematics, fourth grade performance increased by 71% compared to the state average of 40%. The seventh grade improved by 252% compared to the state average of 85%. And, tenth grade mathematics scores improved by 37% compared to 22% statewide. The district's performance on the science assessments saw similar improvement in relation to state averages. Fourth grade scores improved by 76% in the district compared to 26% statewide, while seventh grade scores improved by 26% compared to a state average of 1.7%. Only the district's performance on the tenth grade reading and science assessments were on par with or fell short of state averages.

IMPROVEMENT THEMES

With the arrival of state and federal accountability measures the district realized that it would have to significantly improve student performance to avoid sanctions under the federal No Child Left Behind program. The district leadership team convened an 82 member committee of district stakeholders to revamp the district's improvement plan. While the central office took the initial lead in establishing the district's improvement process, all stakeholders, including board members, administrators, teachers, union representatives, parents, and community members had a voice in the planning process.

The resulting Roadmap to Success identified eight areas of focus for bringing about substantial improvement in student performance. The goals identified in the Roadmap include improving student achievement so that all students are proficient in the WASL by 2008, improve student attendance and graduation rates to meet state standards under AYP by 2007, and to increase parent and community involvement so that by 2007 each school will have established community and parent partnerships. The primary paths to improvement under the Roadmap consist of the following four strategies:

- Improving the quality of instruction;
- Utilizing comprehensive assessments for monitoring and analyzing student performance data;
- Providing research-based interventions for struggling students; and
- Developing instructional leaders throughout the district.

Instructional Improvement

At the core of the district's vision for improvement is the belief that high quality instructional practice is necessary for producing large gains in student achievement. To that end the district has increased instructional time in the core subject areas and made significant investments in professional development for the instructional staff and in new, research-supported instructional materials.

To support reading and mathematics instruction, the district purchased new, research-based curriculum and implemented extended learning time for both subjects. In reading, Houghton Mifflin was adopted as the core curriculum for grades K-6 while High Point is used for interventions in grades 6-12. The mathematics curriculum consists of Integrated Math at the elementary level, the National Science Foundation developed Connected Math for middle schools, and SIMMS Integrated Math for the high schools. All are research-based and designed to promote higher order thinking skills and problem solving skills. The district also requires elementary schools to set aside ninety minute reading blocks, with some of the schools with the lowest reading performance, particularly those with large English language learner populations, providing an additional 30-60 minutes of intensive reading instruction per day. Similarly, most elementary schools increased time for mathematics instruction to 70-80 minute blocks. Additionally, district wide pacing schedules were implemented for both reading and mathematics.

To upgrade science instruction, the district recently adopted FOSS (Full Option Science System) Science Kits for the elementary and middle schools. This curriculum also encourages hands-on, problem-based learning where students learn science by doing science. McGraw Hill's Interactions Science was also adopted for interventions with struggling students, although this hands-on physical science curriculum has become so popular that it is increasingly being used with all students.

School-based reading and math coaches are funded by the district to support schools in mastering the new hands-on curricula and in analyzing data for guiding

instructional improvement. Elementary schools are each assigned a full-time reading coach and half-time math coach, while secondary schools are generally provided a full-time reading coach and a .3 math coach. Overall, the district invested over $2.2 million in 32 FTE school-based coaches. Nearly all of the funding for these coaches comes from categorical dollars, including federal Reading First and Title II, and state I-728 funding. While district officials feel that greater gains could be realized if schools had full-time math coaches as well, there is no additional funding available. At least one of the elementary schools has elected to use its own discretionary funds to pay for a full-time math coach.

A comprehensive assessment system was also implemented to enable the district to track progress and diagnose learning problems. In addition to the WASL, the district administers a number of formative, diagnostic and summative assessments, including the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessment to assess specific reading skills, the Direct Writing Assessment for assessing the 6 traits of analytical writing, and regular unit and theme-based assessments that were packaged with the reading and mathematics curricula. The district is providing substantial professional development opportunities in the use of student assessment data for guiding instruction.

Another key component for the success of these strategies is the development of a strong professional community among the professional staff. Professional development and teacher mentors are provided to support collaboration among teachers for identifying best practices, mastering new instructional strategies, analyzing student data, and initiating interventions when necessary.

All of these strategies for instructional improvement require intensive professional development to ensure effective implementation. In addition to the cost of the reading and math coaches, the district spent nearly $2.5 million on professional development activities in 2005, including nearly $1 million for stipends and substitutes to provide teachers with additional time for training, and another $1 million for internal and external trainers and consultants. Much of this spending was focused on the priority topics of literacy, mathematics, professional collaboration, and data use. The district also provides substantial student-free time, including 14 days during the teacher contract year and early release time every Monday afternoon. However, under the terms of the teacher contract the majority of this time is controlled by individual teachers and may be used for purposes other than professional development, such as classroom setup or teardown, grading papers, or parent conferences. The district also provides 2-3 days of training prior to the start of the school year for academies for teachers new to the district. These academies focus on the district's math and reading programs and using data to guide instruction.

Services and Interventions for Struggling Students

The district has taken a two-tiered approach to providing services for at-risk and struggling students. First, it provides prevention services such as all-day kindergarten and pre-kindergarten programs. Second, it provides additional learning time for older

students who are below grade level, have failed or are in danger of failing the WASL, or for students with limited English language skills. The following provides a brief summary of the services available to students in the district's schools.

Early Childhood

The district offers a district wide pre-kindergarten summer academy for incoming kindergarteners who are identified as lacking in academic or social skills. The program is designed to help prepare these children for kindergarten during the upcoming fall. The program serves approximately 350-450 children annually and the classes are typically held at the school where the child will attend kindergarten. The program costs approximately $150,000 per summer and is funded largely through state I-728 funds.

Full-Day Kindergarten.

The district uses various funding sources to extend all of its kindergarten classes to full day.

Class Size

There is no district strategy for reducing class sizes due primarily to the high cost of this strategy. The district allocates school staffing funds based on the state's staffing ratios. Class sizes tend to be 24 or 25 in elementary schools and 29 in the secondary schools. However, most of the district's elementary schools regroup students for reading instruction into smaller groups based on ability levels.

Extended Learning Time

The district encourages all schools to offer extended learning time for struggling students. How this time is configured is left up to individual schools. Some schools have altered their bell schedules to provide intervention time during the regular school day. Others have implemented extended day programs before or after school or on Saturdays. Typically, teachers from the school, supported by aides, tutor small groups of 3-8 students using the school's standard reading or mathematics curriculum or aligned intervention programs. The extended learning time may also be used for test preparation for the WASL. Because these programs are school-based, there is little comprehensive information about total staffing or costs across the district. The extended learning time programs are paid for primarily with state I-728 funds. Five elementary and the two middle schools also received three-year federal 21st Century Learning Center grants to support their extended learning programs.

Tutoring

The district's schools have few, if any, full-time certified teacher tutors. Most staff hired specifically to support instruction through tutoring are instructional aides who have received training in the intervention programs with which they work. Regular

classroom teachers provide much of the tutoring during extended learning time, receiving additional pay if they tutor during their prep period or before or after their contract day. Small group tutoring occurs both in the extended learning time programs and during the longer instructional blocks for reading and mathematics. Most of the intervention programs used in the district, such as High Point for literacy, incorporate ability grouping and small group tutoring.

Summer School

The district provides summer school programs at every school site in the district. The configuration of the programs varies slightly from school to school and from K-8 to high school. All of the summer school classrooms are staffed by certified teachers with assistance from instructional aides for small group work. Class sizes tend to be smaller than during the regular school year. The elementary summer school classrooms serve 10 students per teacher with a 0.7 instructional aide. The middle schools serve 16 students per classroom with a teacher and a .25 aide, while at the high school level there are 16 students for each teacher with no aide. The summer school program serves about 4,000 students per year. The cost of the 2005 summer school program was approximately $986,000.

Instructional Leadership

The district believes that to effectively initiate and maintain the improvement strategies embodied in the Roadmap, strong instructional leaders must be present in each of the district's schools. In addition to developing teacher leaders through its professional community building initiative, the district strives to provide nearly as much professional development for school principals as for classroom teachers. Ongoing leadership training available to principals includes:

- Training through Federal Programs on how to make the most effective use of building Title I and LAP monies;
- Training by Dwayne Baker on classroom observations;
- Training on the use of data to support instructional improvement through the Center for Educational Effectiveness;
- Enrolling several principals per year in a two week leadership institute at the Harvard School of Education.

LESSONS LEARNED

District I has far surpassed most other districts in the state in student achievement gains over the past five years by focusing relentlessly on improving teaching and learning and ensuring that students have access to the interventions they need to be successful. Some of the key lessons learned from their experiences include:

- Establishing clear goals and benchmarks focused on improving teaching and learning – making the classroom the focal point of improvement.

- Providing the tools needed to reach their goals, including high quality, research-based instructional strategies and materials and data on student learning.
- Providing extensive professional development opportunities focused on academics and aligned with their curricula and state standards.
- Promoting a collaborative professional culture through teacher coaching and mentoring.
- Giving students who need more help additional learning time to master the material.
- Aligning district resources with its strategic plan for improvement and holding schools accountable for fidelity with the plan.

By adopting these strategies District I has achieved far greater gains in student achievement than the state as a whole over the last five years, particularly at the elementary and middle school levels. Although the district still trails the state in overall student performance it appears to be on a path to exceeding the performance of most other districts in the state.