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Strategic School Funding for Results (SSFR)

Assessing the Distribution of Fiscal and Personnel Resources across Schools

A Report Prepared for Twin Rivers Unified School District
SSFR Research Report #01 (TRUSD)

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Acknowledgments

About Strategic School Funding for Results (SSFR)

Purpose

During the 2009-10 school year, the American Institutes for Research (AIR) and Pivot Learning Partners (PLP) formed a partnership with three large California school districts—Los Angeles, Pasadena, and Twin Rivers Unified School Districts—to begin a project to implement and evaluate the impact of a comprehensive approach to local school finance, governance, and human resource management. With the ultimate goal of improving the level and distribution of both teacher effectiveness and student learning opportunities, the *Strategic School Funding for Results (SSFR)* project was designed to (a) develop and implement more **equitable** and **transparent** strategies for allocating resources within each district; (b) link those strategies to policies and processes designed to encourage **innovation, efficiency,** and **teacher effectiveness;** and (c) strengthen **accountability** for improving student outcomes.

What policies underlie SSFR?

The theory of action underlying the project encompasses the following three elements: a culture of innovation and efficiency, increased transparency, and resource equity.

1) *A **culture of innovation and efficiency** can be achieved by:*
   a) *increasing school autonomy linked with accountability for results;*
   b) *creating appropriate incentives for improving the performance of principals, teachers, and other school faculty;*
   c) *ensuring access to a wide range of educational choices by families and children; and*
   d) *providing school leaders with the opportunity to select and purchase various support services from the central office.*
2) ***Increased transparency** can be achieved by:*
   a) *simplifying and clarifying the processes by which resources are allocated to schools; and*
   b) *increasing the participation of a wide range of stakeholders in the design of these processes.*
3) ***Equity** can be improved by allocating dollars to schools based on student needs.*

The results of this evaluation will provide information to help federal, state, and local policymakers in their consideration of policies that will improve learning opportunities for all children.

What are the benefits of participation in the SSFR project?

Within the framework of the SSFR project, the AIR/PLP team provides the districts with data tools and analysis, technical assistance, coaching, and training to implement the funding strategies and evaluate their success. While there are common themes being promoted across the three participating districts, each has adopted its own focus and is adapting the SSFR components to fit its unique culture and context. Each of the three participating districts has committed time on the part of its leadership and staff to participate effectively in this project and has acknowledged that the project represents a collaborative effort between the AIR/PLP and district leadership teams. The formative nature of the project allows for a mutual learning experience between the participating districts and the AIR/PLP team and the creation of a strong partnership in successfully implementing SSFR.

How is SSFR being funded?

During the 2009-10 school year, the William and Flora Hewlett and Ford Foundations provided grants to the AIR/PLP team to support the first phase of the SSFR work. August 1, 2010 marks the beginning of the second phase of the project. During the spring of 2010, the Institutes for Education Sciences (IES) in the U.S. Department of Education awarded a grant to the AIR/PLP team to support the further development of the SSFR model over the next three years. In addition, the AIR/PLP team submitted proposals to the Hewlett and Ford Foundations to extend their support of the implementation and evaluation components of the project over the same three-year period. Finally, the AIR/PLP team in collaboration with our three district partners has also submitted a proposal for a grant under the Investing in Innovation (I3) program by the U.S. Department of Education to extend the development, implementation, and evaluation of SSFR over the next five years.

The result of this work will provide a guidebook for other districts interested in implementing their own version of the SSFR model and a series of reports describing the changes in the patterns of resource allocation and student outcomes that coincided with the implementation of SSFR in the three districts.

Highlights

Using fiscal data provided by the finance office of the school district, and personnel data obtained from the California Basic Education Data System (mantained by the California Department of Education, or CDE), we present analyses to provide a foundation for local policymakers that may be used to assess whether there are inequities in the way fiscal and personnel resources are distributed across schools. We begin our analysis of the equity of inputs with the examination of outputs; first we examine the relationship between the school percentage of students eligible for free and reduced lunch program and the school level performance data, obtained from the CDE. This is followed by an analysis of the relationship between school resource allocation (spending and staffing) and student needs. We find that:

- Schools with the highest percentage of students from low-income families exhibited the lowest performance on the California Academic Performance Index (API).

- The highest-need schools, those serving the higher percentages of students identified as being socioeconomically disadvantaged and/or English language learners, generally spent somewhat more per pupil than the lowest-need schools.

- Schools with the highest percentages of low-income students had relatively more FTE teachers per 100 students.

- In terms of the qualifications of teachers, elementary and middle schools with the highest percentages of low-income students had somewhat more experienced teachers than other elementary and middle schools (the differences were about one year, on average). The high schools with the highest percentages of low-income students tended to have the least experienced teachers compared to other high schools.

- Out-of-field teaching appeared to be randomly distributed across high schools, showing no consistent relationship to student needs.

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Purpose of this Report

The policies we are proposing for implementation under the Strategic School Funding for Results (SSFR) project are designed to promote horizontal and vertical equity for students by developing a funding mechanism that distributes dollars to schools based on student needs. Horizontal equity refers to treating similar students in similar ways (for example, funding students with similar need and cost-related circumstances equally), while vertical equity refers to treating different students in systematically different ways (i.e. funding students with different need and cost-related circumstances differently). The differences in treatment are intended to acknowledge the variations in the cost of serving students with different educational needs. Simply stated, high need students cost more to educate. For the purposes of this report, we measure student need based on the measure provided by TRUSD of a student identified as being socioeconomically disadvantaged (SED) in 2009-10 or classified as an English learner (EL).

This report is intended to provide data to help policy makers in the district assess how equitably they have distributed resources in the face of current student performance and student needs. The purpose of this report is to help district decision makers begin to address the following policy question:

Do higher need students have sufficient access to the additional resources they need to achieve the district and state educational goals?

To answer the question properly, several steps are required including formerly defining educational goals of the district, developing programs that will achieve the defined goals, and evaluating whether schools are being provided the appropriate resources to support these programs. While these steps are part of the larger SSFR project, the current report provides baseline information on student outcomes and patterns of resource allocation (e.g. spending, teacher staffing rations, etc.) to help inform this process.

It is commonly accepted that students from relatively low-income families arrive at school with fewer educational experiences than their high-income (HI) counterparts, and continue receiving less support conducive to academic success outside of school throughout their educational career. This deficit in experiences necessitates greater investments of educational resources in order to offer comparable opportunities for success in education, the job market, and life in general. Similarly, students classified as EL in the U.S. are more likely to come from low-income households, and such students may require more and different kinds of resources to provide them with the same educational opportunities as their non-EL counterparts.

We begin this report by presenting the patterns of variation in student performance across schools serving varying proportions of high need students. We focus our attention on the Academic Performance Index (API) used to assess student outcomes across a broad array of subject areas in California schools.[1]

With the concepts of vertical and horizontal equity in mind, we follow this analysis of differential student performance by exploring the patterns of variation in the access to educational resources afforded to students with different needs. Through this analysis, we reveal patterns of resource allocation resulting from a combination of various policies, rules, and regulations that govern how resources are distributed across schools. We measure access to school resources in a variety of ways, including per-pupil spending from different revenue sources and the quantities and qualifications of certified school personnel.[2]

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[1] The API is a single number compiled by the California Department of Education, ranging from a low of 200 to a high of 1,000, which reflects a school's performance level, based on the results of statewide testing (http://www.cde.ca.gov/ta/ac/ap/documents/infoguide09.pdf).

[2] We have produced a separate **Technical Appendix** to this report that contains a complete set of tables and graphical displays of all of the analyses relevant to this report.

Student Need and Student Performance

▶ *Schools with high proportions of low-income students have the lowest performance levels as measured by their Academic Performance Indexes (APIs).*

Exhibits 1a, b, and c show the negative relationship between the API and the percentage of students from low-income families across all school levels (elementary, middle, and high school). Each dot in these plots represents one school, and the lines represent the average differences in API values for schools with different proportions of students from low-income families. For example, based on our analyses of the 2008-09 data for Twin Rivers Unified School District (TRUSD), an elementary school with 90 percent students from low-income families is estimated to have an API about 76 points lower than a school with 60 percent students from low-income families. A middle school with 95 percent students from low-income families is predicted to have an API about 41 points lower than a school with 80 percent students from low-income families. A high school with 90 percent students from low-income families is expected to have an API about 64 points lower than a school with 70 percent students from low-income families.

Obviously, these variations in performance are not solely due to differences in student need characteristics. The variations in student performance suggest that many other factors play a role in determining student performance.

But the story is even more complicated than that, because some of the other factors that may influence performance are also correlated with student need. For example, at least some portion could be associated with differences in resources that have been invested in the children both this year and in previous years of school. But these negative relationships do suggest a strong role for student need in determining outcomes, and they further imply that some additional investment in educational and other resources (e.g., health or nutritional services) may be necessary to level the playing field. With that in mind, we now turn to an exploration of the variations in school resources and how they are associated with student needs.

Access to Fiscal Resources

▶ *On average, high-need schools (i.e., those with the highest percentages of students from low-income families) appear to spend more than low need schools.*

Exhibits 2a, b, and c reveal a positive relationship between per-pupil spending and the percentage of students from low-income families by school level (elementary, middle, and high school) for the school year of 2008-09. Each dot or square in these plots represents a school. The dots represent schools with low percentages of EL students (i.e., below the median for the sample of schools), while the squares represent schools with high percentages of EL students (i.e., above the median value for the

sample). The size of the dots or squares reflect school size.

The *fitted line* shown in each exhibit represents the average predicted spending as it relates to differences in the percentage of students from low-income families. For example, using the predictions based on this fitted-line, we estimate that an average elementary school in which 90 percent of its students are from low-income families spends about $1,326 per pupil more than a school in which 60 percent of its students are from low-income families ($6,757 versus $5,430 per pupil). For middle and high schools, the slopes of the lines suggest a positive relationship between spending and percent low-income students, but as with the elementary schools, there is a lot of variation around the trend line.

These scatter plots suggest that there are a lot of other factors that influence the level of per-pupil spending at each school site. First, there is a positive correlation between the percent of EL students and the percent of students from low-income families. This high correlation is implied by the concentration of the square dots (representing schools percent EL above the median) at the right-hand side of the elementary and middle school graphics.[3] Thus, to some degree the additional spending associated with percent of low-income students appears to be picking up some of the effects of a high percent of ELs on spending.

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[3] The actual correlation between EL and percentage of low-income students is 0.65, 0.84, and 0.93 for elementary, middle, and high schools, respectively.

Exhibit 1a, 1b, 1c. 2009 Base API by Percent Free and Reduced Price Lunch Students

2009 Base API by Percent Socioeconomically Disadvantaged (SED) Students for TRUSD Elementary Schools

Legend: ● 2009 Base API ── Fitted Values ▲ Estimated Points (60% and 90% SED)

2009 Base API by Percent Socioeconomically Disadvantaged (SED) Students for TRUSD Middle Schools

Legend: ● 2009 Base API ── Fitted Values ▲ Estimated Points (80% and 95% SED)

2009 Base API by Percent Socioeconomically Disadvantaged (SED) Students for TRUSD High Schools

Legend: ● 2009 Base API ── Fitted Values ▲ Estimated Points (65% and 90% SED)

Graphs show plots of 2009 Base API by 2009-10 percent socioeconomically disadvantaged across TRUSD schools. Dotted lines indicate average levels of API and SED.
Source: California Department of Education

Exhibit 2a, 2b, 2c. Relationship between Overall Expenditures per Pupil and Poverty

Plot of Overall Spending Per-Pupil by Percent Socioeconomically Disadvantaged (SED)
TRUSD Elementary Schools in 2008-09

Per-Pupil Expenditure

Percentage of Students Socioeconomically Disadvantaged

| ■ Per-Pupil Spending High ELL | ● Per-Pupil Spending Low ELL | —— Fitted Line | ▲ Estimated Points (60% and 90% SED) |

Note: size of plotted points are scaled according to school enrollment.

Graph shows plot of 2008-09 per-pupil spending by percent of SED students in 2009-10 across TRUSD elementary schools.

Plot of Overall Spending Per-Pupil by Percent Socioeconomically Disadvantaged (SED)
TRUSD Middle Schools in 2008-09

Per-Pupil Expenditure

Percentage of Students Socioeconomically Disadvantaged

| ■ Per-Pupil Spending High ELL | ● Per-Pupil Spending Low ELL | —— Fitted Line | ▲ Estimated Points (80% and 95% SED) |

Note: size of plotted points are scaled according to school enrollment.

Graph shows plot of 2008-09 per-pupil spending by percent of SED students in 2009-10 across TRUSD middle schools.

Plot of Overall Spending Per-Pupil by Percent Socioeconomically Disadvantaged (SED)
TRUSD High Schools in 2008-09

Per-Pupil Expenditure

Percentage of Students Socioeconomically Disadvantaged

| ■ Per-Pupil Spending High ELL | ● Per-Pupil Spending Low ELL | —— Fitted Line | ▲ Estimated Points (65% and 90% SED) |

Note: size of plotted points are scaled according to school enrollment.

Graph shows plot of 2008-09 per-pupil spending by percent of SED students in 2009-10 across TRUSD high schools.

Average Differences in Per-pupil spending from Restricted versus Unrestricted Funds

▶ *Much of the positive difference in per-pupil spending between high and low need schools appears to be driven by differences in access to restricted (or categorical) sources of revenues.*

Using 2008-09 data, exhibits 3a, b, and c provide another perspective on the variation in per-pupil spending across schools serving various percentages of high need students. In addition to the overall per-pupil spending, these exhibits show the amounts of per-pupil spending that come out of unrestricted as opposed to restricted general fund revenues. Restricted revenues include funds derived from federal and state categorical programs directed at particular student populations, such as students from low-income families, EL students, or students eligible for special education services. To make the spending comparisons for the elementary schools in each school year, we listed the schools in order according to the percentage of students from low-income families, from highest to lowest, and divided the schools into three equal groups. We then determined the average percentage of low-income students along with the average percentage of EL students in each group of the schools.

Based on this analysis, we can see in exhibit 3a that the elementary schools in the third of the schools with the highest percentage of low-income students were spending $738 more ($6,851 versus $6,113) then the schools in the lowest third

of the distribution. The data show that these schools served 25 percent more (92 versus 67 percent) low-income students and 7 percent more EL (34 versus 27 percent) students. Moreover, elementary schools in the upper two-thirds of the distribution also spent more than $660 more per pupil (48 percent more) out of restricted funds ($2,038 versus $1,375). Differences between these three groups of schools with regard to their average spending from unrestricted funds amounted to less than $200 per pupil (a less than 4 percent difference) with no systematic pattern evident in the data. Thus, the differential spending between the highest- and lowest-need schools was driven almost exclusively by differences in spending out of restricted funds.

For the middle and high schools, we simply list each school; they are arranged from those with the lowest percentage of students from low-income families (on the left) to highest (on the right) in each exhibit. The range of percentages of low-income students is from 80 to 97 percent for middle schools and 65 to 90 percent for high schools. As with the elementary schools, we observe that the schools with the higher percentages of low-income students generally had higher percentages of EL students as well. We observed no pattern in the relationship between the percentage of low-income students and the percentage of students eligible for special educations services.

On average, total spending tended to be somewhat higher in the highest-need schools for both middle and high schools, but the relationship was far from consistent. The

schools with the highest percentages of low-income students tended to have significantly more spending out of restricted funds. For example, the two highest-need middle schools spent more than $3,000 per pupil out of restricted funds, versus between $1,400 and $2,200 for the three lowest-need schools. The two highest-need high schools spent from $1,900 to almost $2,000 per pupil out of restricted funds versus between $1,400 and $1,600 per pupil for the two lowest need-schools.

Spending out of unrestricted funding also tended to show some positive relationship to the percentage of low-income students. Highland Academy of Arts and Design, the high school with the second-highest percentage of low-income students, showed the highest per-pupil spending out of unrestricted dollars, at more than $300 per pupil more than Foothill High, with the third-highest percentage of low-income students ($5,038 versus $4,713, respectively), but about $800 per pupil higher than the school (Rio Linda High) with the lowest percentage ($5,038 versus $4,143, respectively).

Exhibit 3a, 3b, 3c. Expenditures Per Pupil for 2006-07 to 2008-09

Overall, Restricted and Unrestricted Expenditures Per Pupil for TRUSD Elementary Schools in 2008-09, by Poverty Categories (Overall Expenditure in Bold)

	Low Poverty Category	Medium Poverty Category	High Poverty Category
Overall	$6,113	$6,919	$6,851
Restricted	$1,375	$1,997	$2,078
Unrestricted	$4,738	$4,921	$4,773
Poverty	67%	84%	92%
ELL	27%	35%	34%
SE	12%	14%	10%

Overall, Restricted and Unrestricted Expenditures Per Pupil for TRUSD Middle Schools in 2008-09 (Overall Expenditure in Bold)

	Rio Linda Junior High	Foothill Farms Junior High	Norwood Junior High	Rio Tierra Junior High	Martin Luther King Jr.
Overall	$6,738	$6,238	$5,971	$8,254	$8,106
Restricted	$2,247	$2,184	$1,411	$3,040	$3,232
Unrestricted	$4,491	$4,054	$4,561	$5,213	$4,873
Poverty	80%	87%	90%	93%	97%
ELL	21%	23%	34%	33%	40%
SE	16%	16%	13%	19%	16%

Overall, Restricted and Unrestricted Expenditures Per Pupil for TRUSD High Schools in 2008-09 **(Overall Expenditure in Bold)**

	Rio Linda High	Foothill High	Highlands Academy of Arts and Design	Grant Union High
Overall	**$5,567**	**$6,307**	**$7,019**	**$6,356**
Restricted Expenditures	$1,424	$1,593	$1,982	$1,933
Unrestricted Expenditures	$4,143	$4,714	$5,038	$4,424
Poverty	65% Poverty	67% Poverty	77% Poverty	90% Poverty
ELL	20% ELL	18% ELL	18% ELL	34% ELL
SE	10% SE	11% SE	17% SE	14% SE

Per-Pupil Expenditure

Graph shows the restricted expenditures in the darker color, the light bar represents the unrestricted expenditures, and the dollar amount on top of each bar is the overall restricted per-pupil expenditure by school. The graph shows the expenditures for elementary, middle and high schools for the year of 2008-09.

Access to Personnel Resources

▶ *Schools with higher percentages of students from low-income families tend to have lower ratios of pupils per teacher, but also tend to have less experienced teachers and greater proportions of students exposed to teachers in the core subject areas who are teaching outside the subjects they are authorized to teach.*

Underlying the expenditure differences between schools serving varying percentages of high need students are differences in the quantities and qualifications of the staff assigned to the schools. Using data available from the California Department of Education, we analyzed the relationship between the three different personnel resource measures and the percentage of students from low-income families. Specifically, we focused on: the teacher staffing ratio (the number of teachers per 100 students); average teacher experience; and the percentage of students being taught by out-of-field instructors (those that did not have the authorization in the subject area or schooling level they taught).

Our analyses reveal that in 2008-09, elementary schools serving the highest percentage of low-income students (98 percent) employed roughly one teacher for every 17 students (about 5.8 full-time-equivalent teachers per 100 students), while the schools with the lowest percentage of low-income students (57 percent) employed about one teacher for every 21 students (about 4.8 full time equivalent teachers per 100 students,

see exhibit 4a). For middle schools, these pupil-teacher ratios have a narrower range from one teacher per 18 students in the school with the lowest percentage of low-income students (80 percent) to one teacher per 20 students in the middle school with the highest percentage of low-income students (97 percent, see exhibit 4b). For high schools, the pupil-teacher ratios ranged from one teacher per 22 students in schools with the highest percentage of low-income students (90 percent), to one teacher for every 23 students in the schools with the lowest percentage of low-income students (65 percent, see exhibit 4c).

The ratios of pupil-support personnel to students were also positively related to the percentage of low-income students in the elementary and middle schools. For high schools, the ratios of pupil-support personnel to students were negatively related to poverty, but the differences in ratios were relatively small.

Unlike most medium-sized urban districts, Twin Rivers Unified shows a slightly positive relationship between average experience levels of teachers and percentage of low-income students at the elementary and middle school level. The highest-need elementary schools tend to have more experienced teachers than the lowest-need schools (roughly 10 years versus 17 years of experience, exhibit 5a). For middle schools, the difference is smaller: the higher-need schools tend to have slightly more experienced teachers than the lower-need schools (roughly 13 years versus 12 years of experience, exhibit 5 b). For high schools, we find the usual

relationship—the highest needs schools tend to have the least experienced teaching staff (about 14 versus 10 years experience, exhibit 5c).

While one could argue based on previous literature in the field that differences in average teacher experience may not translate directly into differences in teacher quality, it is very clear that such differences in experience do translate into differences in the average compensation levels of teachers between schools serving varying percentages of low-income students. Such differences represent potential funds that could be used in the more disadvantaged schools to employ more qualified teachers under alternative compensation schemes or to provide resources for more or better professional development experiences.

In addition to teacher experience, we also explored the extent of out-of-field teaching across high schools. We found no pattern in relation to the percentage of low-income students (see exhibit 6). Two of the high schools had more than 10 percent of the students exposed to out-of-field teachers in core subject areas, while the other two had negligible exposure[4].

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[4] See the **Technical Appendix** for a more detailed analysis.

Exhibit 4a FTE Teachers per 100 Pupils for TRUSD Elementary Schools in 2008-09

School (SED%, ELL%, SE%)	FTE Teachers Per 100 Pupils
Harmon Johnson (98%, 54%,…)	5.81
North Avenue (97%, 45%, 12%)	6.62
Michael J. Castori (97%, 33%,…)	5.07
Aero Haven (96%, 53%, 8%)	6.00
Del Paso Heights (96%, 56%,…)	5.47
Noralto (96%, 61%, 9%)	4.65
Northwood (96%, 39%, 15%)	4.88
Hagginwood (96%, 36%, 13%)	6.48
Woodlake (95%, 20%, 10%)	5.39
Kohler (93%, 39%, 12%)	4.51
Oakdale (93%, 30%, 9%)	6.30
Madison (92%, 21%, 10%)	5.33
Woodridge (92%, 33%, 9%)	4.63
Fairbanks (92%, 49%, 17%)	6.02
Larchmont (92%, 27%, 16%)	5.48
Frederick Joyce (91%, 23%,…)	5.41
Garden Valley (91%, 56%, 11%)	4.95
Sierra View (89%, 33%, 14%)	4.65
Village (88%, 25%, 12%)	5.07
D. W. Babcock (88%, 26%,…)	5.10
Hillsdale (86%, 29%, 10%)	5.40
Warren A. Allison (86%, 26%,…)	4.86
Hazel Strauch (85%, 29%, 9%)	4.74
Foothill Oaks (81%, 23%, 9%)	4.54
Dry Creek (80%, 26%, 10%)	4.77
Pioneer (80%, 21%, 10%)	4.52
Rio Linda (80%, 25%, 19%)	4.80
Westside (73%, 13%, 7%)	4.88
Orchard (70%, 23%, 22%)	4.78
Ridgepoint (70%, 22%, 7%)	4.41
Frontier (66%, 15%, 7%)	5.11
Regency Park (57%, 18%, 11%)	4.82

Legend: ■ FTE Teachers Per 100 Pupils — — — Linear (FTE Teachers Per 100 Pupils)

Exhibit 4b FTE Teachers per 100 Pupils for TRUSD Middle Schools in 2008-09

	Rio Linda Junior High	Foothill Farms Junior High	Norwood Junior High	Rio Tierra Junior High	Martin Luther King Jr.
FTE	4.91	4.55	4.35	5.71	5.48
	80% SED	87% SED	90% SED	93% SED	97% SED
	21% ELL	23% ELL	34% ELL	33% ELL	40% ELL
	16% SE	16% SE	13% SE	19% SE	16% SE

Legend: FTE Teachers Per 100 Pupils; Linear (FTE Teachers Per 100 Pupils)
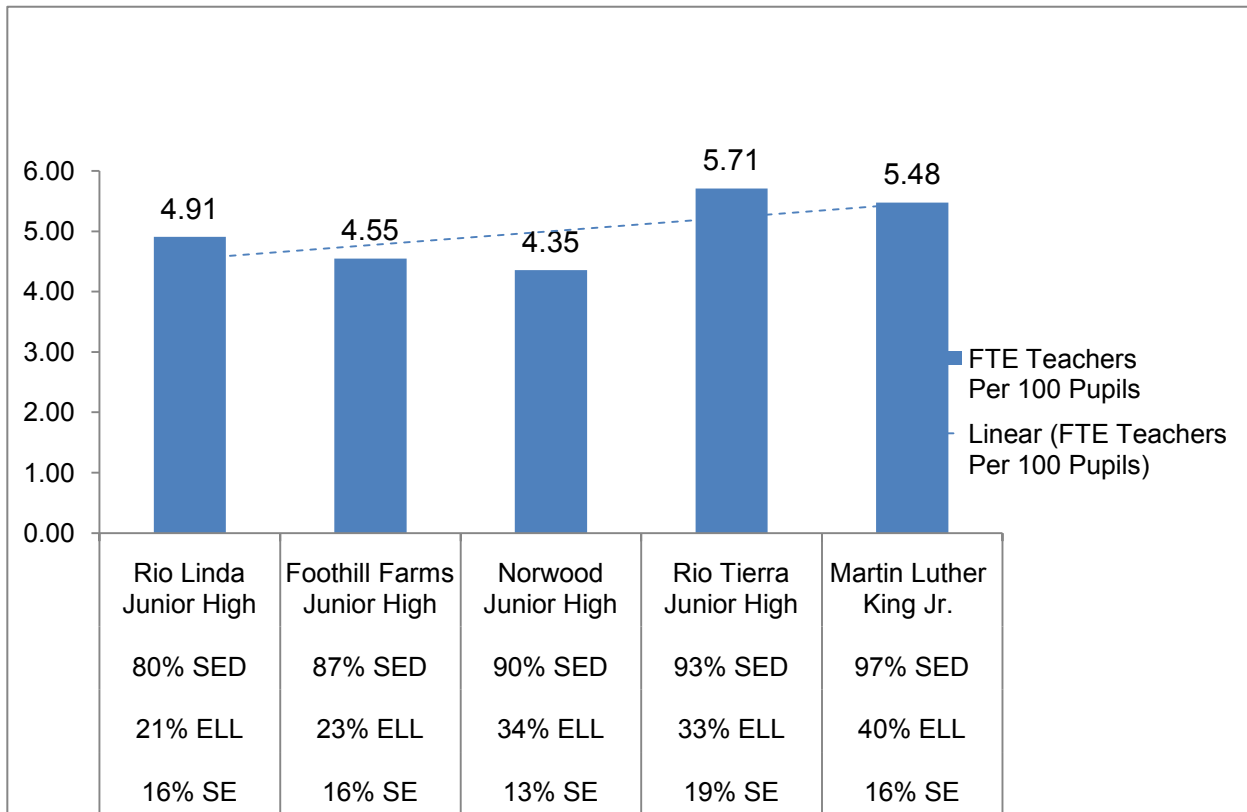
Exhibit 4c FTE Teachers per 100 Pupils for TRUSD High Schools in 2008-09

	Rio Linda High	Foothill High	Highlands Academy of Arts and Design	Grant Union High
FTE	4.36	4.59	4.72	4.60
	65% SED	67% SED	77% SED	90% SED
	20% ELL	18% ELL	18% ELL	34% ELL
	10% SE	11% SE	17% SE	14% SE

Legend: FTE Teachers Per 100 Pupils; Linear (FTE Teachers Per 100 Pupils)
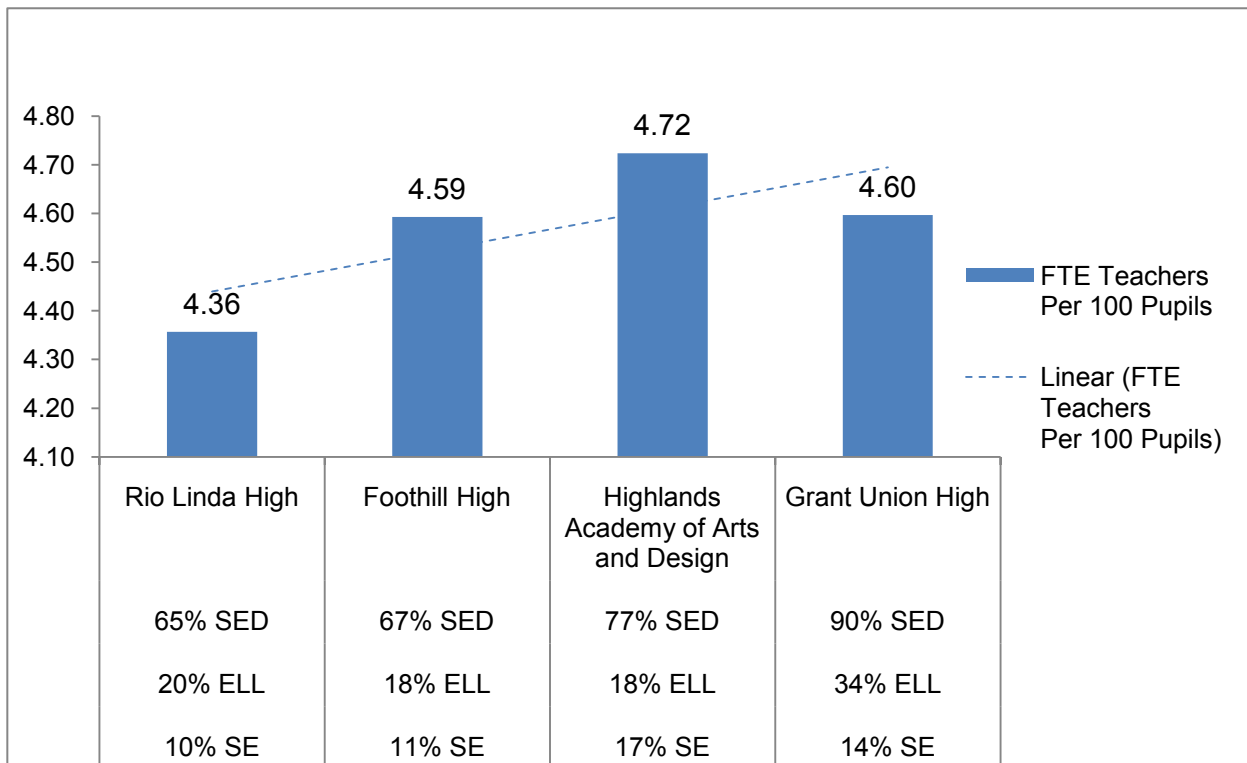
Graph shows FTE teachers per 100 students represented by the darker column. The fitted line represents a linear estimation of FTE teachers per 100 pupils; the graph is for the school year of 2008-09.

Exhibit 5a Average Years of Teacher Experience for TRUSD Elementary Schools in 2008-09

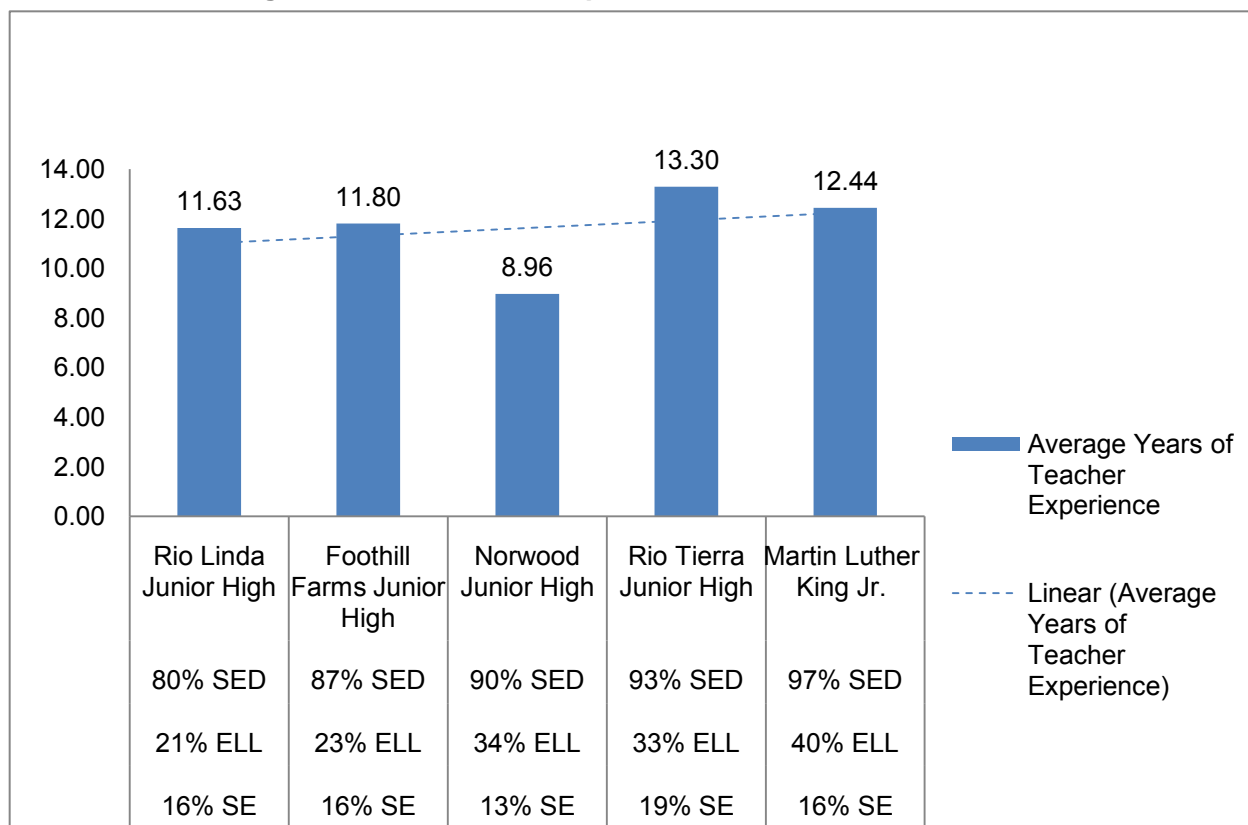| School (SED%, ELL%, SE%)	Average Years of Teacher Experience
Harmon Johnson (98%, 54%, 8%)	16.63
North Avenue (97%, 45%, 12%)	15.40
Michael J. Castori (97%, 33%,…)	8.56
Aero Haven (96%, 53%, 8%)	9.00
Del Paso Heights (96%, 56%, 15%)	15.07
Noralto (96%, 61%, 9%)	13.13
Northwood (96%, 39%, 15%)	18.48
Hagginwood (96%, 36%, 13%)	16.12
Woodlake (95%, 20%, 10%)	17.59
Kohler (93%, 39%, 12%)	9.67
Oakdale (93%, 30%, 9%)	14.00
Madison (92%, 21%, 10%)	11.82
Woodridge (92%, 33%, 9%)	10.23
Fairbanks (92%, 49%, 17%)	13.46
Larchmont (92%, 27%, 16%)	10.80
Frederick Joyce (91%, 23%, 13%)	13.45
Garden Valley (91%, 56%, 11%)	9.70
Sierra View (89%, 33%, 14%)	14.97
Village (88%, 25%, 12%)	11.19
D. W. Babcock (88%, 26%, 18%)	13.49
Hillsdale (86%, 29%, 10%)	17.32
Warren A. Allison (86%, 26%,…)	13.83
Hazel Strauch (85%, 29%, 9%)	18.83
Foothill Oaks (81%, 23%, 9%)	12.30
Dry Creek (80%, 26%, 10%)	8.89
Pioneer (80%, 21%, 10%)	15.16
Rio Linda (80%, 25%, 19%)	9.70
Westside (73%, 13%, 7%)	16.72
Orchard (70%, 23%, 22%)	12.58
Ridgepoint (70%, 22%, 7%)	13.41
Frontier (66%, 15%, 7%)	13.62
Regency Park (57%, 18%, 11%)	10.11

Legend:
- Average Years of Teacher Experience
- Linear (Average Years of Teacher Experience)

Exhibit 5b Average Years of Teacher Experience for TRUSD Middle Schools in 2008-09

	Rio Linda Junior High	Foothill Farms Junior High	Norwood Junior High	Rio Tierra Junior High	Martin Luther King Jr.
Avg Years	11.63	11.80	8.96	13.30	12.44
	80% SED	87% SED	90% SED	93% SED	97% SED
	21% ELL	23% ELL	34% ELL	33% ELL	40% ELL
	16% SE	16% SE	13% SE	19% SE	16% SE

Legend: Average Years of Teacher Experience; Linear (Average Years of Teacher Experience)

Exhibit 5c Average Years of Teacher Experience for TRUSD High Schools in 2008-09

	Rio Linda High	Foothill High	Highlands Academy of Arts and Design	Grant Union High
Avg Years	13.83	15.21	11.43	10.09
	65% SED	67% SED	77% SED	90% SED
	20% ELL	18% ELL	18% ELL	34% ELL
	10% SE	11% SE	17% SE	14% SE

Legend: Average Years of Teacher Experience; Linear (Average Years of Teacher Experience)
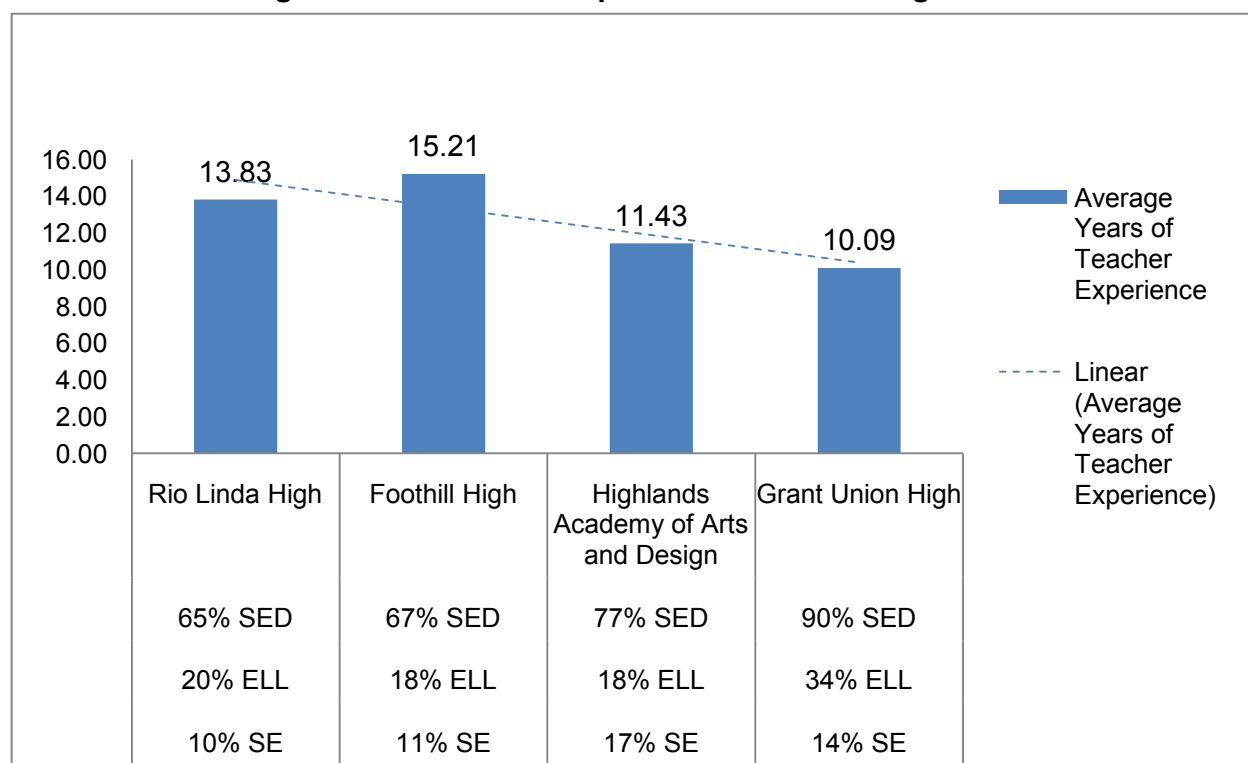
Graph shows the average years of teacher experience for elementary schools, the fitted line represents a linear estimation of the average years of teacher experience. The graph is for elementary, middle and high schools for the school year of 2008-09.

Core Six Subjects - Percent of Students Taught by Out-of-Field Teachers for TRUSD High Schools in 2008-09

	Rio Linda High	Foothill High	Highlands Academy of Arts and Design	Grant Union High
	1%	12%	10%	0%
	65% SED	67% SED	77% SED	90% SED
	20% ELL	18% ELL	18% ELL	34% ELL
	10% SE	11% SE	17% SE	14% SE

■ Percent of Students Taught by Out-of-Field Teachers in Core Six Subjects

- - - Linear (Percent of Students Taught by Out-of-Field Teachers in Core Six Subjects)
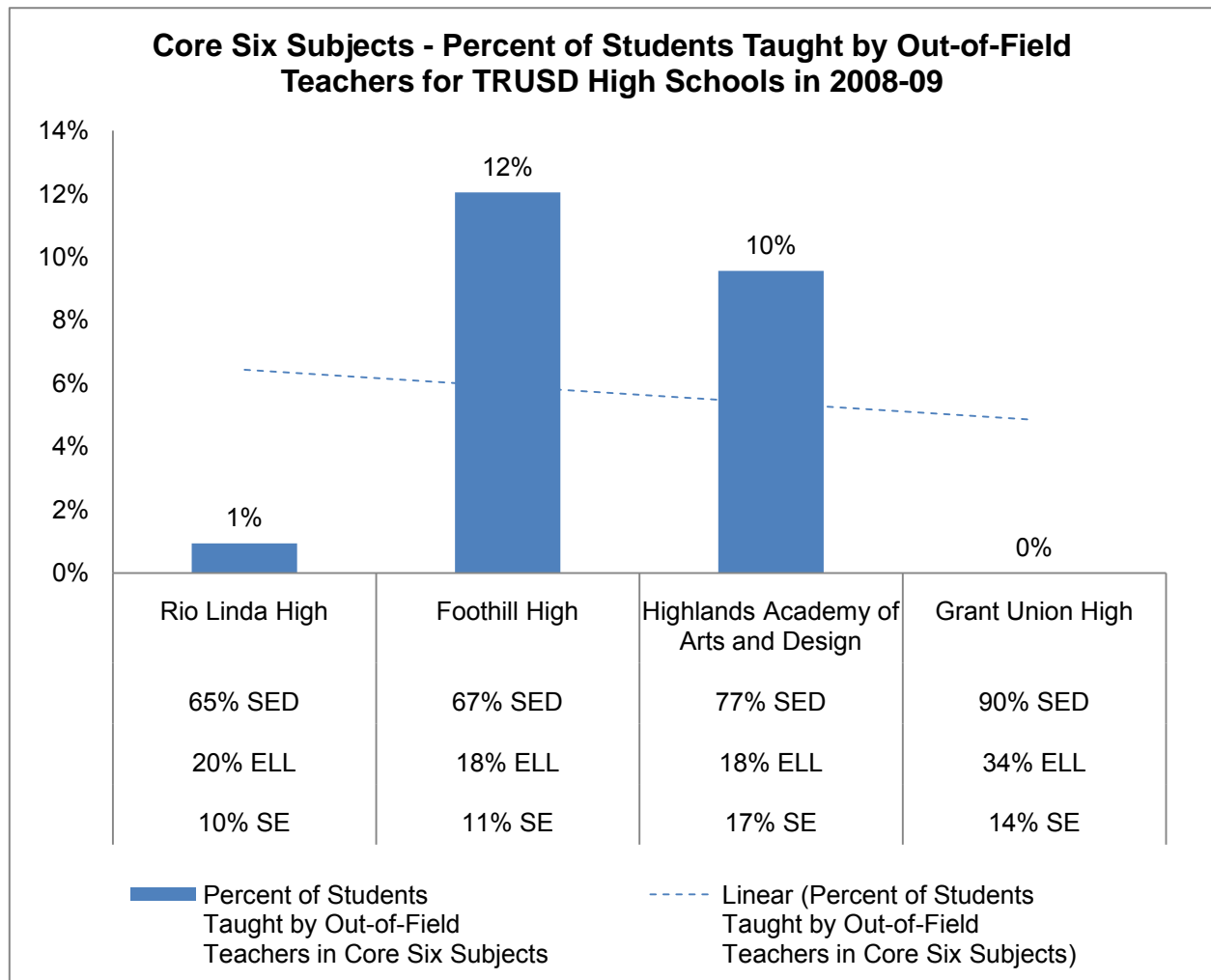
Graph shows the percent of out-of-field teaching for high schools for the school year of 2008-09. The solid line represents a linear estimation of the percent of out-of-field teaching and SED.

Concluding Remarks

Using data on school level performance from the California Department of Education, fiscal data provided by the finance office of the school district, and personnel data obtained from the California Basic Education Data System maintained by the California Department of Education (CDE), we have presented analyses that provide a foundation that local policymakers can use to assess whether there are inequities in the way fiscal and personnel resources are distributed across schools. The following points summarize our findings:

- Schools with the highest percentage of students from low-income families exhibited the lowest performance on the California Academic Performance Index (API).

- The highest-need schools generally spent somewhat more per pupil than the lowest-need schools.

- Schools with the highest percentages of low-income students had relatively more FTE teachers per 100 students.

- In terms of the qualifications of teachers, elementary and middle schools with the highest percentages of low-income students had somewhat more experienced teachers than other elementary and middle schools (the differences were about one year, on average). The high schools with the highest percentages of low-income students tended to have the least experienced teachers compared to other high schools.

- Out-of-field teaching appeared to be randomly distributed across high schools, showing no consistent relationship to student needs.

We leave it to the local policymakers to determine the implications for equity within the district. Indeed this returns us to the question we asked at the beginning of this report:

> *Do higher need students have sufficient access to the additional resources they need to achieve the district and state educational goals?*

Put simply, the question comes down to, "*How much is enough?*"

To answer this question, district policy makers must be explicit about the goals that have been set for all students across the spectrum of educational needs. Policy makers must then (1) ascertain what programs and services will be necessary to achieve those goals, (2) cost out the resources necessary to deliver those programs and services across the range of student need populations, (3) create a need-based funding model for allocating funding to schools based on this costing out analysis, and (4) compare the results of the need-based funding model to the actual patterns of spending and resource allocation we have observed in this report. This comparison would provide the district with a way of assessing whether the current patterns of resource allocation are sufficiently equitable or adequate to achieve their goals.