



Joint Legislative Audit and Review Committee

LEGISLATIVE AUDITOR
Tom Sykes

506 16th Avenue SE
Olympia, WA 98501-2323
Campus Mail: PO Box 40910

PHONE (360) 786-5171
FAX (360) 786-5180
TDD 1-800-635-9993

SENATORS

Al Bauer
Georgia Gardner, Chair
Jim Horn, Secretary
Valoria Loveland
Bob Oke
Val Stevens
James West
R. Lorraine Wojahn

REPRESENTATIVES

Gary Alexander
Mark Doumit
Cathy McMorris
Tom Mielke
Val Ogden, Asst. Secretary
Debbie Regala
Phil Rockefeller
Mike Wensman, Vice Chair

E-Mail: neff_ba@leg.wa.gov
Internet: <http://jlarc.leg.wa.gov>

K-12 Finance And Student Performance Study Report 99-9

This study responds to a legislative mandate to examine issues relating to finance and student performance in K-12 public schools in Washington State. Major conclusions are:

- Revenue allocation in Washington is equitable, and districts tend to spend the funds they receive in the same way, regardless of their size or per pupil spending level.
- Districts and schools with higher proportions of low income students have smaller student-teacher ratios but also have teachers with less education and experience.
- External factors such as family income and education have more influence on student performance than education-related factors. Having smaller student-teacher ratios in the early years may improve student performance. Improving teacher quality and reorganizing the use of school time and resources may improve student performance more, and be more cost-effective, than reducing the student-teacher ratio.
- The state does not collect data on expenditures or certain student groups at the school level. Most districts maintain data on student groups at the school level, and reporting this information to the state would facilitate the analysis of schools with similar student populations. However, collecting school expenditure data would be difficult and may not be very useful. Available staff data can be used to estimate school spending.

State funding for K-12 education represents nearly half the state's General Fund and 75 percent of schools' total operating funds, one of the highest percentages of state funding nationwide. Districts provide the state with data on ways they use their funds, mainly at the district and school levels. Using these and other data for districts and schools for school year 1996-97, we studied

- Revenue and expenditure patterns
- Student and staff patterns
- Factors affecting student performance
- Various data availability issues.

Revenue and Expenditure Patterns

Washington's system of allocating funds to districts is equitable. The funding gap between the wealthiest and poorest districts in Washington is one of the smallest in the nation. District funding of schools is also relatively equitable: schools having higher proportions of students with special needs

receive and spend more money than schools with fewer needy students.

Districts and schools spend money in similar ways, regardless of their size or spending level. For example, nearly all districts spend about 60 percent of their funds on instruction, and spending on central administration averaged about 7 percent and varied little. Among schools, spending varied a bit more. Spending per student is highest in high schools and lowest in elementary schools. Spending on staff compensation varied little in schools and districts.

Most education spending is for staff compensation, so schools and districts with higher expenditure levels tend to have three common staff-related characteristics: more staff per pupil (that is, smaller student-staff ratios), higher levels of staff compensation, and lower proportions of teachers. These three factors explain most of the variation in expenditures among schools, districts, and states.

Student and Staffing Patterns

Districts and schools have varying levels of students with special needs. Small districts and schools have the highest percentages of lower-income students. Other types of students with higher costs (e.g., special education students) are distributed more evenly among districts, regardless of district size or spending level.

The level of teacher education and experience varies little, regardless of the socioeconomic status of a district or school.¹ Schools with lower socioeconomic levels have teachers with slightly less education and experience. High schools tend to have the most experienced and educated teachers.

Washington averages about 20 students per teacher, one of the largest in the nation.² The smallest student-teacher ratios in Washington are found in the smallest and highest per pupil spending districts; high schools have the highest ratios. The ratio also gets smaller as the socioeconomic status of a school or district declines. The student-teacher ratio is relatively large because of how Washington compares with other states on three other measures: per pupil expenditures, the percentage of staff who are teachers, and the level of staff compensation. More teachers can be hired when per pupil expenditures are higher, and having more teachers compared to other staff can also reduce the ratio. Higher staff compensation costs decrease the funds available to hire more teachers. In school year 1995-96, Washington's per pupil expenditures and percentage of teachers were slightly below, while total staff compensation costs were about 16 percent above, the national average.

Factors Affecting Student Performance

External factors have a much stronger influence on student performance than education-related factors. For example, family income and parent education influence student performance the most, factors over which educators have no control. Among education-related factors, smaller student-teacher ratios can improve performance, although improving teacher

¹ Socioeconomic status was measured in terms of the percentage of lower-income students, that is, those who are eligible for free or reduced-price meals.

² This student-teacher ratio is not the same as class size. A typical classroom in Washington has more students.

quality may improve student performance more and be more cost-effective. We found that higher levels of teacher education and experience have more influence on test scores than smaller student-teacher ratios. Large reductions in class sizes could substantially improve performance but would be costly. Reorganizing the use of school time and resources would also be a more cost-effective way to improve performance.

Data Availability Issues

The state collects considerable information related to K-12 district and school operations, although it does not collect data on the enrollment of certain student groups (e.g., bilingual or special education students) or expenditures for individual schools. Most districts maintain information on student groups and aggregate this data. Given the influence of student characteristics on student performance, collecting enrollment data for student groups in schools that most districts already have could facilitate analyses of schools that share similar student populations and support both education reform efforts and the state's new education accountability system.³

While collecting school-level expenditure data could serve several useful purposes, the potential benefits may not exceed the costs of making school expenditure data available and usable. The number of teachers and the level of teacher education and experience in a school largely determine school spending. Because the state already collects this data for individual schools, the state already has data that can be used to approximate expenditures at the school level.

Recommendations

Consistent with state laws for education reform and accountability, we recommend the state collect enrollment data at the school building level for bilingual, special education, and highly capable students. Most districts already have this information at the school building level.

While having school-level expenditure data may serve useful purposes, the state does not need to start collecting this data because existing school-level data can be used to estimate these expenditures.

³ See SSB 5418, Chapter 388, Laws of 1999.