ED452578 2000-12-00 How Schools Allocate and Use Their Resources. ERIC Digest Number 143.

ERIC Development Team

www.eric.ed.gov

Table of Contents

If you're viewing this document online, you can click any of the topics below to link directly to that section.

ERIC Identifier: ED452578
Publication Date: 2000-12-00
Author: Picus, Lawrence O.
Source: ERIC Clearinghouse on Educational Management Eugene OR.

How Schools Allocate and Use Their Resources. ERIC Digest Number 143.

THIS DIGEST WAS CREATED BY ERIC, THE EDUCATIONAL RESOURCES INFORMATION CENTER. FOR MORE INFORMATION ABOUT ERIC, CONTACT

ACCESS ERIC 1-800-LET-ERIC

School finance has traditionally concentrated on the distribution of resources to school districts, focusing primarily on the equitable distribution of funds within a state. In recent years, more attention has been paid to the issue of productivity-how efficiently school districts use the funds they receive to provide education to students.

To date, research on productivity has not been conclusive (see, for example, Picus forthcoming). One thing is clear, however-before we can fully understand how to make schools more productive, we must better understand how schools use the resources currently available to them.

This Digest summarizes data on expenditures and staffing patterns in the nation's schools, weighs the impact of financial resources on students' educational outcomes, and discusses the implications of these allocation patterns for future policy at both the state and local level.

WHERE DOES THE MONEY GO?

All fifty states collect fiscal information from school districts on revenues and expenditures and on district employees. The revenue data generally contain information about the sources and amounts of revenue received by each school district. Expenditure data are most frequently collected by object of expenditure, divided into categories such as professional salaries, classified salaries, employee benefits, materials and supplies, and capital expenditures. States now also collect expenditure data by broad program area or function, such as instruction, administration, transportation, plant operations and maintenance, and debt service.

Staffing data typically consist of information on the number of licensed staff members employed by each district and their job title (teacher, administrator, principal, librarian, counselor, and so forth). Some states maintain databases with information on instructional aides. In a few states, data on teacher credentials and/or teaching assignments are also maintained.

The National Center for Education Statistics (NCES) collected data on expenditures by function at the national level between 1920 and 1980. Over the sixty years these data were collected, the percentage spent on instruction declined and the percentage spent on operations, maintenance, and fixed charges (benefits) increased. In addition, the proportion spent on instruction remained about 61 percent from about 1950 onward.

During the late 1980s and early 1990s, NCES inaugurated a project to collect more detailed and consistent expenditure data that would be available for cross-state comparisons. During this process they made some changes to the categories of data collected. During the 1990s, these data show that instructional expenditures continued to compose about 61 percent of the operating budget, rising slightly from 60.5 percent in

1991 to 61.7 percent in 1995. Data from the 1990s also show what have become typical school district expenditure patterns: about 10 percent for student and instructional support, 3 percent for district administration, 6 percent for site administration, 10 percent for operations and maintenance, and about 10 percent for transportation, food, and other services.

WHAT DOES THE MONEY BUY?

The single biggest expenditure in school districts is for personnel. Translating the broad expenditure patterns identified above into staffing patterns is the first step in analyzing what happens to the education dollar. In looking at staffing patterns in school districts from fall 1960 to fall 1995, a number of interesting patterns emerge.
Instructional staff dropped from 69.8 percent in 1960 to 67.1 percent in 1997. But this small decline masked larger changes in the composition of instructional staff. Teachers constituted 74.1 percent of total staff in 1950. By 1960 that figure had dropped to 64.8 percent, and by 1995 only 52.0 percent were identified as instructional staff. At the same time, the percentage of instructional aides rose from almost zero in 1960 to 9.9 percent of staff in 1995.

Central-office administrators composed just 1.7 percent of total staff in 1995 and school-site administrators just 2.4 percent. Combined, administrators composed a total of 4.1 percent of all staff, a fairly small percentage in light of charges that the education system spends too much on administration.

Similarly, the percentage of support staff also rose over this time period, from 28.2 percent in 1960 to 31.2 percent in 1995. These numbers show that about one-third of staff in the education system are neither instructors nor administrators. Rather they are secretaries, custodians, bus drivers, and other operations and maintenance personnel. When policymakers and local taxpayers ask why only 60 percent of expenditures are spent on instruction, a partial answer is that nearly one-third of educational funds are allocated to building, maintaining, and repairing buildings, and transporting and feeding students.

The bottom line, however, is that the percentage of teachers dropped nearly 33 percent in the second half of the twentieth century. Many teachers have been "replaced" by instructional aides, pupil support staff, and, as we shall show below, by specialist teachers within schools who do not teach in regular classrooms. The policy and productivity issue is whether this use of resources is the most effective.

WHAT IMPACT DO RESOURCES HAVE ON STUDENT ACHIEVEMENT?

There is considerable disagreement over the impact of additional resources on

educational outcomes of students. The complexity of the educational system, combined with the wide range of outcomes we have established for schools and the multitude of alternative approaches we use to fund schools, make it difficult to come to any firm conclusions about whether or not money matters.
We do not know what the impact on student performance would be if schools or school districts were to dramatically change the way they spend their resources. In 1992, Odden and Picus noted that the research summarized above suggests that "if additional education revenues are spent in the same way as current education revenues, student performance increases are unlikely to emerge." Knowing whether high-performing schools use resources differently than other schools would help to clarify the issue of whether money matters.

More recently, Odden (1997) found that the schooling designs developed as part of the New American Schools project have generally led to increased student performance. In each of the seven models studied, schools are required to divert resources away aides and teachers with special assignments and focus on increasing the number of regular classroom teachers, thereby lowering average class size. In addition, each of the designs requires substantial investments, in both time and money, for professional development.

Odden suggests that these investments can often be funded through elimination of a position through attrition. He asserts that for relatively little additional money, schools can fund existing programs and organizational structures that will enhance student learning.

WHAT DO THESE PATTERNS MEAN FOR FUTURE POLICY DECISIONS ON SCHOOL

FINANCE AT THE STATE AND LOCAL LEVELS?Regardless of what impact additional funds might have, it is important that existing resources be used as efficiently as possible. In her study of the Boston school district, Miles (1995) found that if all individuals classified as teachers were to teach classes of equal size, the average class in the district could have been reduced from 22 to 13 students. Although this reallocation would have placed all children with disabilities in regular programs, Miles also projected what the average class size would be if some of the most severely disabled children continued to receive services under current programs. Dramatic class size reductions were still possible.

Miles's work highlights the fact that in many districts it may be possible to further reduce class size through changing teacher assignments throughout the district. To the extent that smaller class size improves student performance, these changes could potentially improve student performance at little or no cost.

Odden and Busch (1998) argue that schools can find the additional funds (which range from $82,000 to $349,000 per school per year) to finance the various New American Schools designs creative use of categorical funds, elimination of classroom aides, and reallocation of resources, such as the elimination of one or two teaching positions. While some of these options may result in larger classes or fewer teachers, the more intensive use of staff and greater professional development activities available seem to result in improved student performance in many of the schools that have adopted these designs.

Before seeking additional funds, there may be ways to restructure what is done with existing funds. Levin's Accelerated Schools, the New American Schools program designs, and hard analyses of current staffing patterns may all yield improved student performance.

RESOURCES

Miles, Karen H. "Freeing Resources for Improving Schools: A Case Study of Teacher Allocation in Boston Public Schools." Educational Evaluation and Policy Analysis, 17, 4 (Winter 1995): 476-93. EJ 520 985.
National Center for Education Statistics. Digest of Educational Statistics, 1989. Washington, D.C.: Author, 1989. 542 pages. ED 312 792.

_____. Digest of Education Statistics, 1997. Washington, DC: Author, 1998. 70 pages. ED 417 230.

Odden, Allan. "The Finance Side of Implementing New American Schools." Paper prepared for the New American Schools, Alexandria, Virginia, 1997.

Odden, Allan, and Carolyn Busch. Financing Schools for High Performance: Strategies for Improving the Use of Educational Resources. San Francisco: Jossey-Bass, 1998. 276 pages.

Odden, Allan R., and Lawrence O. Picus. School Finance: A Policy Perspective. New York: McGraw Hill, 1992. 363 pages.

Picus, Lawrence O. In Search of More Productive Schools: A Guide to Resource Allocation in Education. Eugene, Oregon: ERIC Clearinghouse on Educational Management, University of Oregon, forthcoming. 113 pages.

This publication was prepared with funding from the Office of Educational Research and Improvement, U.S. Department of Education, under contract No. ED-99-C0-0011. The ideas and opinions expressed in this Digest do not necessarily reflect the positions or

policies of OERI, ED, or the Clearinghouse. This Digest is in the public domain and may be freely reproduced. The text of this Digest may be viewed electronically at http://eric.uoregon.edu EA 030 658.

—

Title: How Schools Allocate and Use Their Resources. ERIC Digest Number 143.
Document Type: Information Analyses---ERIC Information Analysis Products (IAPs) (071); Information Analyses---ERIC Digests (Selected) in Full Text (073);
Available From: ERIC Clearinghouse on Educational Management, 5207 University of Oregon, Eugene, OR 97403-5207; Tel: 800-438-8841; Web site: http://eric.uoregon.edu.
Descriptors: Academic Achievement, Educational Finance, Elementary Secondary Education, Expenditures, Finance Reform, Financial Support, Policy Formation, Public Schools, Resource Allocation
Identifiers: ERIC Digests
###

—

[Return to ERIC Digest Search Page]