A peer-reviewed scholarly journ
Editor: Gene V Glass
College of Education
Arizona State University

disinclined to support any bills that required increased expenditures. Accordingly, the voucher bill was promoted as revenue neutral. To accomplish this, the bill excluded from eligibility those children already enrolled in private schools. The bill thus avoided the extensive costs that would have resulted if the state took on an obligation to pay for the education of these existing private school students. Colorado's official legislative fiscal analyst supported the claim of fiscal neutrality. The analyst routinely prepares a 'fiscal note', which accompanies legislation as it makes its way through the house and senate. The note for the voucher bill concludes, "No additional state funding will be required for the Colorado Opportunity Contract Pilot Program." Yet the law's key eligibility exclusion, barring students already enrolled in private school, amounts to little more than a short-term damper on what would have been the law's long-term fiscal impact. This exclusion did not and could not apply to students kindergarten – students who have never before enrolled in any school, whether public or private.

The Colorado law was targeted at low-income students who live in the attendance areas of low-performing public schools. For children entering first grade or beyond, the eligibility provisions include attendance in public school. For those entering kindergarten, however, this provision was inapplicable, and the only remaining eligibility criteria required that the child's family be low-income and live within the boundaries of a neighborhood school rated "low" or "unsatisfactory." Students meeting these eligibility criteria for children entering kindergarten are already (pre-voucher-policy) enrolled in private schools. That is, some low-income families in these aenrol3emaining

This article calculates the cost of that subsidy by combining two approaches. Due to differences in data availability between Denver and the rest of the state, the Denver calculations use extensive data on private school attendance and free and reduc

performing school. These facets of the law help to address criticisms 1 and 2, above.

The law addresses the third criticism by leaving with the home school district some of the per-pupil operating revenue (PPOR) for each voucher student. Under the state's foundation grant system, the state calculates the appropriate PPOR for each school district and then allocates sufficient state funding to the districts after accounting for local revenues (40-50% of the PPOR funding is generated

Ultimately, the goal of this analysis is to forecast the additional expenditures by Colorado taxpayers (and additional allocations to public school districts), as the law would have moved toward full implementation. To do this, I will first arrive at an estimate, per grade level, of the number of low-income students presently attending private schools in Denver.

The private schools enrolling the 1,246 students referenced above vary from k-5 to k-12 schools. Accounting for the number of grade levels served at each particular school yields a figure of 142.5 low-income students per primary grade level currently enrolled in private school in Denver (see Appendix A). (Note 15)

But, while all these students are income-qualified, some of them will nonetheless not be eligible to participate because they do not live in the attendance area of a low or unsatisfactory DPS elementary school. Seventy-one percent of DPS schools are rated low or unsatisfactory; 29% are rated average or higher. Students who live in the attendance area of one of this latter group of higher-achieving schools would not be eligible for vouchers, even if they themselves qualify for FRL.

Assuming that Denver's low-income students are evenly distributed geographically and assuming that the student population in each attendance area is approximately equal, then we can predict that 71% of the 142.5 students (101 students) per grade level qualify pursuant to both the income requirement and the attendance area requirement.

But one would not expect such an even distribution. Rather, one would expect that more of the current private school low-income students live in the neighborhoods with the most low-income families. That is, assuming that the choice of a low-income family of whether or not to attend a private school is made independent of the family's residence, then the rate would not vary by attendance area, and the attendance areas with higher numbers of low-income families would produce more such families attending non-public schools.

In the following example I will, for simplicity's sake, call the 71% of DPS schools that are ranked low or unsatisfactory "Group A" schools; the 29% higher-ranked schools are then in "Group B." Imagine two attendance areas, one for a school ranked low (i.e., in Group A) and one for a school ranked high (in Group B). Each area includes 1,000 kindergarten-aged children. The attendance area of the low-ranked school has a poverty rate of 80% (approximately 800 kindergarteners qualify for FRL); the attendance area of the high-ranked school has a poverty rate of 40% (approximately 400 kindergarteners qualify for FRL). If the rate of opting for private school among low-income families is one percent, then the first group would produce eight such kindergarteners, while the second would produce only four.

In actuality, the percentage of low-income students in low and unsatisfactory DPS schools averages over twice that of higher-ranked schools (84% versus 36%). (Note 16) Given the 84/36 ratio, we can make the conservative assumption that current private school low-income students are twice as likely to live in Group A attendance areas than in Group B attendance areas. (Note 17)

Is this a reasonable assumption? On the one hand, we might expect low-income families who live in wealthier areas to have more social capital and to be more efficacious and more likely to be active choosers. The friends, neighbors, and other contacts of these families are probably more educated and informed about how to negotiate the process of school choice. But we also might expect more families to opt for a private school if their local public school is less successful. For instance, one-quarter of students enrolled in DPS's Steck Elementary receive FRL. But the school is highly ranked. A low-income family in the Steck attendance area may opt for private school, but the impetus is likely to be religious beliefs or some other nonacademic criterion. In contrast, DPS's Ford Elementary (with 90% FRL) has an unsatisfactory rating. A low-income family in the Ford attendance area may choose a non-public school for similar religious reasons but is also more likely to make such a choice based on academic considerations.

Overall then, the assumption that current private school low-income students are twice as likely to live in Group A attendance areas than Group B attendance areas seems reasonable. (Note 18) Applying this assumption to the data, we come up with 1.82 students per grade level in Group A school

additional annual taxpayer costs associated with the kindergarten eligibility exception as it applies to students in the DPS attendance area.

To arrive at estimates for the other ten Colorado school districts where students are eligible for vouchers, I turn to national data concerning the likelihood that a low-income student will attend a private school. This second part of the analysis requires several unsatisfactorily grounded assumptions. At each such juncture, the analysis uses conservative assumptions and estimates, almost certainly resulting in a figure that is below the actual cost likely to have beed incurred as the voucher policy was implemented. In the absence of better data, however, these conservative assumptions offer the best available option for an analysis of this nature.

Alt and Peter (2002), using data from the NCES “Schools and Staffing Survey (SASS),” state that 49.5% of U.S. private schools in the 1999-2000 school year enrolled at leasl

Additional Payments to School Districts

As noted earlier, the Colorado voucher law contained a provision designed to reduce the likelihood that public schools would be financially harmed by the diversion of their funding to private schools. Voucher funding was structured as an alteration to the regular foundation grant system. The law called for the state to send each school district an allotment sufficient to fund the usual full PPOR for each voucher student. Voucher money is then deducted from school district budgets at a rate of 85% of PPOR for high school students, 75% for elementary and middle school (grades 1-8) students, and 37.5% for kindergarteners. The school districts retain the difference.

Since the law also required school districts to administer the policy, and since school districts have fixed costs that would not be reduced by the transfer of voucher students into private schools, the money retained by the school districts may or may not have been enough to offset district-level financial costs of the policy. The present analysis does not attempt to address that issue.

Instead, this analysis simply estimates the amount school districts would have received and retained, above and beyond the amount intended and accounted for in earlier analyses. The following table sets forth those additional amounts for each of the eleven school districts.

Table 3
Gains to School Districts Due to Kindergarrat0.5go32igibiliry Ex0.5cept4.8(i)238(o)

The figures used as a basis for this calculation

11. This analysis proceeds on the assumption that the participation caps will have no effect on the financial impact of the kindergarten eligibility exception. This is because the number of possible students that would have received vouchers based on this eligibility exception is much smaller than the participation caps. The only instance where the cap may have become a factor would be the first year in DPS, when the enrollment cap is 1%, or 685 students. This compares to an estimate of 103 students taking advantage of the eligibility exception.

12. I thank all three institutions for their assistance, particularly the Archdiocese, whose schools account for the vast majority of the private school enrollment of Denver's low-income students.

13. In cases of inconsistencies, the numbers were averaged. The author recognizes the inaccuracy of this app32.hr95-a--3.21(gqe)4.7(6(a)48utio.4(.)]0aoeu408(m)-1.4(es)-6(clar)4.6(ifying infor)4.6(m)-1.4(ation.)]TJ0.

. Available online at www.cde.state.co.us/cdenutritran/download/pdf/20022003FRREDUCED03rev1.pdf

Colorado Education Association (2003). . Available online at http://www.coloradoea.org/media/hb1160.impact.pdf

Howe, K. R. (1997). . New York: Teachers College Press.

Howe, K. R. & Welner, K. G. (2003). . Boulder, CO: EPIC Policy Center. Available online at http://education.colorado.edu/epic/index.asp

(slip opinion, Colorado Supreme Court). Available online at http://www.cobar.org/opinions/opinion.cfm?OpinionID=4688

Sarche, J. (2004, August 28). Colo. supreme court strikes school vouchers. . Available online at http://www.rockymountainnews.com/drmn/local/article/0,1299,DRMN_15_2996408,00.html

, 536 U.S. 639 (2002).

About the Author

Kevin G. Welner
School of Education
University of Colorado
Boulder, CO 80309-0249
(303) 492-8370
E-mail: kevin.welner@colorado.edu

B.A. University of California, Santa Barbara, 1985
J.D. University of California, Los Angeles, 1988
Ph.D. University of California, Los Angeles, 1997

Kevin G. Welner is an Assistant Professor at the University of Colorado at Boulder's School of Education, and co-director of CU-Boulder's Education and the Public Interest Center (http://education.colorado.edu/epic/index.asp). He is the author of

Appendix C
Cost to Taxpayers of Kindergartener Eligibility

Appendix D
Flowchart Illustrating Eligibility of Students for the Colorado Opportunity Contract Pilot Program

The World Wide Web address for the is **epaa.asu.edu**

Editor: Gene V Glass, Arizona State University

Production Assistant: Chris Murrell, Arizona State University

Email: walterko@uol.com.br

- María Beatriz Luce (1998—2003)
  Universidad Federal de Rio Grande do Sul-UFRGS
- Simon Schwartzman (1998—2003)
  American Institutes for Resesarch–Brazil

Canadá

- Daniel Schugurensky

- Alejandro Canales
Universidad Nacional Autónoma de México
Email: canalesa@servidor.unam.mx
- Rollin Kent
Universidad Autónoma de Puebla. Puebla, México
Email: rkent@puebla.megared.net.mx
- Javier Mendoza Rojas (1998—2003)
Universidad Nacional Autónoma de México
- Humberto Muñoz García (1998—2003)
Universidad Nacional Autónoma de México

Perú

- Sigfredo Chiroque
Instituto de Pedagogía Popular, Perú
Email: pedagogia@chavin.rcp.net.pe
- Grover Pango
Coordinador General del Foro Latinoamericano de Políticas Educativas, Perú
Email: grover-eduforo@terra.com.pe

Portugal

- Antonio Teodoro