

State Tuition Tax Credits: A School Choice Policy Recommendation

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Abstract

Public schools are afflicted by a litany of ailments ranging from the methodological to the practical. Public schools operate on a conflicted educational philosophy, are rife with inefficiencies, and result in educational monopolies. A state tuition tax credit system is the most advantageous policy option available in regards to education reform and school choice initiatives. This paper will examine some of the 11 state tuition tax credit programs currently in operation as well as other school choice options, and identify problems inherent in the public school system. State tuition tax credits are a superior educational policy option as compared with the public education system, because they allow free market pressures to reform inefficiencies in the public school system, and allow private schools an increased ability to compete. Other positive effects include increased parental choice, higher academic achievement, increased graduation rates, and decreased strains on state budgets. This paper will attempt to prove that state tuition tax credits are the most efficient and effective school choice policy in use today and should be adopted by the remaining 39 states.

State Tuition Tax Credits: A School Choice Policy Recommendation

School choice programs are proliferating at a rapid rate. The *Wall Street Journal* dubbed 2011 the “Year of School Choice,” as thirteen states passed major education reforms.¹ State tuition tax credits are one of many school choice policy options available to states across America.

Introduced in the late 1990s in the context of controversial voucher programs, state tuition tax credits were proposed as a popular education option consistent with state constitutional authority.² Eleven states have since adopted some form of state tuition tax credit program.³ Despite variations in policy particulars, the basic function of the program allows individuals and corporations to take a portion of their state taxes and transfer them to nonprofit school tuition organizations (STOs). The STOs will directly issue scholarships to K-12 students. Some programs are means tested, some are capped at a certain dollar amount, and others exist to target specific socioeconomic groups. The unifying feature of state tuition tax credit programs is the tax credit; individuals or corporations receive a state income tax credit for donations made to approved charitable organizations, the vehicle through which assistance is provided for children to attend private schools.⁴ The Supreme Court, in *Arizona v. Winn* (2011), upheld Arizona’s state

¹“The Year of School Choice,” *The Wall Street Journal*, July 5, 2011.

²Nicole Stelle Garnett, “A Winn for Educational Pluralism,” 121 *Yale Law Journal Online* 31 (2011), <http://yalelawjournal.org/2011/05/26/garnett.html> (accessed 3/4/2013) referencing Mark Tushnet, *Vouchers After Zelman*, 2002 *Supreme Court Review* 1, 15-18.

³National Conference of State Legislatures, “Tuition Tax Credits,” <http://www.ncsl.org/issues-research/educ/school-choice-scholarship-tax-credits.aspx> (accessed 3/4/2013). States include Arizona, Florida, Georgia, Indiana, Iowa, Louisiana, New Hampshire, Oklahoma, Pennsylvania, Rhode Island, and Virginia.

⁴Garnett, “A Winn for Educational Pluralism,” p. 31. Some programs, like the one in Arizona, allow both individuals and corporations to receive tax credit.

tuition tax credit system as constitutional. This paper will attempt to prove that state tuition tax credits are the most efficient and effective school choice policy in use today and should be adopted by the remaining 39 states.⁵

Educational Philosophy

State tuition tax credit policies demonstrate a clear advantage over other competing education options in that they recognize the nature of education as a religious enterprise. Noah Webster, widely considered to be the father of American education, defined education in his *1828 Dictionary of the English Language* in the following manner:

The bringing up, as of a child, instruction; formation of manners. Education comprehends all that series of instruction and discipline which is intended to enlighten the understanding, correct the temper, and form the manners and habits of youth, and fit them for usefulness in their future stations. To give children a good education in manners, arts and science, is important; to give them a religious education is indispensable; and an immense responsibility rests on parents and guardians who neglect these duties.⁶

While education is typically reduced to a transmission of data and scientific facts about the world, Webster defines education as including instruction in truth, morality, ethics, manners, attitudes, habits, character and responsibility.

Public schools, on the other hand, were originally instituted and designed to be a social force. Herbert Schlossberg argues this point, claiming that public schools were

⁵*Arizona Christian School Tuition Organization v. Winn*, 563 U.S. 1 (2011).

⁶Noah Webster, *An American Dictionary of the English Language 1828*, (West Valley City: Waking Lion Press, 2010) 246.

designed to solve problems of political, economic, social, and criminal derivation.⁷ Moreover, education is inherently religious in nature. Even those who claim to educate from an anti-religious perspective elevate secularism as their religious philosophy. Learning cannot exist in an ideological vacuum, as presuppositions pervade all educational methodologies and philosophies. Education cannot be value-free, because any hierarchy of values is a religious system.⁸ Furthermore, Schlossberg argues that education is unique in that it operates in a framework of assumptions, not assertions. Assumptions bypass the critical faculty and function as powerful ideological tools for those who receive and integrate arguments without actively engaging the preceding assumption—a common phenomenon in many public school classrooms.⁹

This paper also assumes that civil government should be limited in its scope. As Justice Jackson articulated in *West Virginia Board of Education v. Barnett* in 1943, “If there is any fixed star in our constitutional constellation, it is that no official, high or petty, can prescribe what shall be orthodox in politics, nationalism, religion, or other matters of opinion or force citizens to confess by word or act their faith therein.”¹⁰ Justice Jackson establishes an important premise here: the government shall not establish or prescribe matters of opinion. When juxtaposed with the nature of education established above, these two premises cast light upon the issue of government involvement in education. While that question is ripe for analysis in another paper, this discussion will

⁷Herbert Schlossberg, *Idols of Destruction: The Conflict of Christian Faith and American Culture* (Wheaton, IL: Crossway, 1990), 209.

⁸*Ibid.*, 210.

⁹*Ibid.*

¹⁰*West Virginia Board of Education v. Barnette*, 319 U.S. 624, 642 (1943).

focus on state tuition tax credits as a policy option inclusive of the more fundamental assumption that civil authority is limited, and does not encompass liberty of conscience, the heart of education.

Constitutionality: *Arizona v. Winn*

A comprehensive evaluation of a policy must include a discussion of its constitutionality, a gateway consideration that ought to govern the conceptualization and implementation of all policy options. Furthermore, any policy's ability to survive a challenge of constitutionality is central to its success.

Arizona first passed its tuition tax credit program in 1997.¹¹ It was designed to promote school choice at large, but proponents argued that it would prove to be of special value to children from low-income families who traditionally attend poor public schools.¹² The policy has two tax credit schemes which cater to both individuals and corporations if they contribute to school tuition organizations (STOs). Dollar-for-dollar tax credits are available up to \$500 for individuals, or up to \$1,000 for joint filers. Arizona's program does not establish a maximum tax credit ceiling for corporations—they are allowed to contribute up to the equivalent of their entire corporate tax liability and receive it back in dollar-for-dollar tax credits. However, Arizona has capped total tax credits offered, distributing up to \$17.28 million to corporations on a first-come, first serve basis.¹³ Four Arizona residents recently challenged the constitutionality of the state

¹¹Ronald J. Hansen, "High Court Upholds Arizona's Tuition Tax-Credit Program," *The Arizona Republic*, April 5, 2011. See A.R.S. 43-1089 (for individuals) and A.R.S. 43-1183 (for corporations).

¹²*Ibid.*

¹³The \$17.28 million cap is from FY 2010. The cap will increase 20% annually. A concise description of both individual and corporate provisions in the Arizona program can be

tuition tax credit system and the Supreme Court heard the case in *Arizona Christian School Tuition Organization v. Winn*.¹⁴

At issue in *Arizona Christian School Tuition Organization v. Kathleen M. Winn*, et al. was Article III standing, which the Court held taxpayers in Arizona lacked under *Flast v. Cohen* (1968).¹⁵ The majority opinion,¹⁶ written by Justice Kennedy, held that the only taxpayers with standing under *Flast* are those contesting direct monetary outlays on First Amendment Establishment Cause grounds. The majority held that *Flast* does not extend standing to Arizona's taxpayers objecting to tax credit provisions such as provided in Arizona's tuition tax credit scheme, which awarded tax credits to individuals and corporations for contributions made to STOs.¹⁷ The majority concluded that:

This Court has rejected the general proposition that an individual who has paid taxes has a "continuing, legally cognizable interest in ensuring that those funds are not *used* by the Government in a way that violates the Constitution."¹⁸

found at <http://www.ncsl.org/issues-research/educ/school-choice-scholarship-tax-credits.aspx> (accessed 3/4/2013).

¹⁴*Arizona v. Winn*, 563 U.S. 1 (2011).

¹⁵*Flast v. Cohen*, 392 U.S. 83 (1968). Florance Flast joined several others in suit against Wilbur Cohen, the Secretary of Health, Education and Welfare. The suit argued that spending government funds on religious schools violated the First Amendment's opposition to the establishment of religion. In *Flast*, in order to determine standing, the court articulated a two pronged test. First, the taxpayer must be the proper party to challenge the constitutionality of the tax. Second, the taxpayer must "show that the challenged enactment exceeds specific constitutional limitations upon the exercise of the taxing and spending power and not simply that the enactment is generally beyond the powers delegated to Congress by Art. 1, § 8." at 102-103.

¹⁶Chief Justice Roberts and Justices Alito, Scalia, and Thomas all joined in Justice Kennedy's opinion. Justice Scalia also wrote a brief concurrence in which Justice Thomas joined.

¹⁷See Arizona Revised Statute Annotated § 43-1089 (2011), available at <http://www.azleg.gov/FormatDocument.asp?inDoc=/ars/43/01089.html> (accessed 3/4/2013).

¹⁸*Arizona v. Winn*, 131 S. Ct. 1436 at 1442-1443. Quoting *Hein v. Freedom From Religion Foundation, Inc.*, 551 U.S. 587.

On the other hand, Justice Kagan argued in her dissent that *Flast* affords standing to Arizona taxpayers, grounding her assertion in the academic doctrine of “tax expenditure analysis,” and concluding that “targeted tax breaks...are just spending under a different name.”¹⁹

Tax Expenditure Analysis

The tax expenditure analysis relied upon by Justice Kagan in her dissent is weak for three reasons. First, tools of constitutional analysis “must be reasonable, coherent and principled” in their guidance to the courts, and tax expenditure analysis does not pass this test. Second, “the quandaries of defining tax expenditures arise not simply at the margins, but rather at the very core of the concept.”²⁰ Because the concept’s definition is largely nebulous, it would be unwise to create an exception allowing for tax expenditure analysis to be used here. Third, the conclusions drawn by Justice Kagan made on the basis of this analysis violate the nature of private property by enlarging the state’s ability to count all income as government property, or monies.

Concerning the difference between expenditures and tax breaks that tax expenditure analysis attempts to negate, the Court had to determine whether or not direct government spending and tax subsidies were the same. The question of equivalency, particularly in regards to direct public outlays and tax subsidies for constitutional

¹⁹Edward A. Zelinsky, “Winn and the Inadvisability of Constitutionalizing Tax Expenditure Analysis,” 121. *Yale Law Journal Online* 25 (2011), <http://yalelawjournal.org/2011/05/26/zelinsky.html> (accessed 3/4/2013). *Winn*, 131 S. Ct. at 1452; 1456 (Kagan, J., dissenting). Justice Kagan was joined by Justices Breyer, Ginsburg, and Sotomayor in her dissent.

²⁰*Ibid.*, 28.

purposes, is something the Court is well versed in confronting.²¹ “However, Justice Kagan’s dissent in *Winn* is only the second time that tax expenditure doctrine has formally played such an explicit, prominent role in the Court’s decision making.” According to Edward A. Zelinsky, tax expenditure analysis has two key provisions: “...(1) that tax deductions, credits, exemptions and exclusions can be divided into ‘normative’ tax provisions necessary to implement the tax and ‘expenditure’ provisions which deviate from the normative tax, and (2) that such tax expenditures are equivalent to direct monetary outlays.” Tax expenditure analysis has been enormously successful in terms of legal scholarship and legal education, and yet some of its core flaws have never been resolved. Zelinsky points out that tax expenditure analysis provides no bright-line standard or principle by which one can classify tax provisions as normative or otherwise, and thus the distinction between normative provisions necessary for the implementation of the tax and special provisions treated as expenditures is only a pipedream.²²

Justice Kagan contends that “[C]ash grants and targeted tax breaks are a means of accomplishing the same government objective—to provide financial support to select individuals or organizations.”²³ Though this assumption may be true, she employs it to prove that Arizona taxpayers have standing.

²¹Ibid., 26. See, e.g., Edward A. Zelinsky, “Are Tax ‘Benefits’ Constitutionally Equivalent to Direct Expenditures?” 112 *Harvard Law Review* 379 (1998) He discusses four cases from the mid-1990s, where the Court confronted the question of whether tax benefits are direct expenditures.

²²Ibid. For a seminal discussion of tax expenditure analysis, see Stanley S Surrey, “Tax Incentives as a Device for Implementing Government Policy: A Comparison with Direct Government Expenditures,” 83 *Harvard Law Review* 705, 711 (1970). Stanley Surrey is credited with the creation of tax expenditure analysis in 1967 when he was Assistant Secretary of the Treasury for Tax Policy.

²³*Arizona v. Winn*, 23.

Taxpayers who oppose state aid of religion have equal reason to protest whether that aid flows from the one form of subsidy or the other. Either way, the government has financed the religious activity. And so either way, taxpayers should be able to challenge the subsidy.²⁴

If Justice Kagan is correct, then it must also be true that the state has a more basic and fundamental claim to an individual's property than the individual does, justifying broader state claims to private property. The Constitution, on the other hand, assumes individuals have a more basic and fundamental right to property than the state, via the Fourth Amendment. Thus, Justice Kagan's application of tax expenditure analysis is imprudent at best.

Religious Neutrality

Quoting *Flast* in her dissent, Justice Kagan harkens back to the basis of the Establishment Clause: "[O]ne of the specific evils feared by those who drafted the Establishment Clause and fought for its adoption was that the taxing and spending power would be used to favor one religion over another or to support religion in general."²⁵ In essence, Justice Kagan is asserting that tuition tax credits, which "come out of what [citizens] otherwise would be legally obligated to pay the state,"²⁶ will favor one religion over another or support religion in general because to fund education participants will divert their money to religious or parochial schools. Given the nature of tuition tax credits, Kagan's argument breaks down. Placing choice in the hands of individuals, especially parents, as opposed to the state, does not result in state sponsorship of religion, but instead, prevents it. This is true for two reasons. First, if individuals are allowed to

²⁴*Arizona v. Winn*, 2.

²⁵ *Ibid.*, 39.

²⁶ *Ibid.*, 36.

choose where their children are educated with their own money, the state is not sponsoring religion in any way—the individual is—and the First Amendment explicitly protects the individual’s liberty of conscience relative to religious matters, which cannot be separated from education. Justice Kennedy references this logic in his majority opinion:

When the government declines to impose a tax...there is no such connection between dissenting taxpayer and alleged establishment. Any financial injury remains speculative.... And awarding some citizens a tax credit allows other citizens to retain control over their funds in accordance with their own consciences.²⁷

Second, Kagan’s argument assumes that all property belongs to the state. However, if it is true that personal property belongs to the individual, then property retained by the individual and spent by the individual for his own purposes is not a state sponsorship of religion or any other activity or philosophy. Untaxed money never enters the state treasuries, and thus, there is no state establishment of religion, and consequently no violation of the First Amendment. Kagan’s argument lacks constitutional weight.

Parental Choice

Given the inseparable relationship between education and worldview, parental choice in education becomes paramount. If the government is given control over education funding, it then wields an educational monopoly. On the other hand, if parents can choose where their children attend school with their own funds, they can preserve their right to raise and educate their children. Tuition tax credits broaden the educational choice of parents and other interested participants by providing them with a tax credit to sponsor a child in a participating private school. Thus, the close relationship between

²⁷Winn, 14.

parenting, education and religion is respected, as power is retained by those who have the greatest interest in children—the parents.

Academic Achievement vs. National Standards

State policymakers have an option: either they will comply with Washington’s call for national curricula or they will retain control over their own state’s educational achievement standards, and design, tailor, and implement them in ways which reflect the standards of parents and members of the community. A state tuition tax credit system would contribute to the latter by creating educational opportunities through private investments.

The Common Core State Standards Initiative (CCSSI) is the most recent push by the federal government to increase the Department of Education’s (DE) role in education.²⁸ Following in the national policy context of No Child Left Behind (NCLB),²⁹ the American Recovery and Reinvestment Act (ARRA),³⁰ and Race to the Top (RTT)³¹ programs, CCSSI is intended to incentivize state governments to align their educational

²⁸CCSSI was an outcome of the Obama Administration’s joint program with the National Governor’s Association (NGA) and Council of Chief State School Officers (CCSSO). Further coverage of CCSSI can be found in Sandra Stotsky, “Common Core Standards’ Devastating Impact on Literary Study and Analytical Thinking,” Heritage Foundation Issue Brief No. 3800, <http://www.heritage.org/research/reports/2012/12/questionable-quality-of-the-common-core-english-language-arts-standards> (accessed 3/4/2013).

²⁹NCLB was passed in the first George W. Bush Administration. Pub.L. 107-110, enacted January 8, 2002.

³⁰ARRA was passed in the first Obama Administration. Pub.L. 111-5, enacted February 17, 2009.

³¹The \$4.35 billion in the RTT fund is provided for in the ARRA. <http://www2.ed.gov/programs/racetothetop/executive-summary.pdf> (accessed 3/4/2013).

standards with national ones.³² Nevertheless, such programs are ineffective in increasing academic achievement, and states should be cautious to create such a relationship for three reasons.

First, the Constitution denies the federal government authority over educational matters, and the enumeration of Congress's powers in Article 1 Section 8 reflects this prohibition. Second, experts agree that national standards lack requisite academic rigor. Former U.S. Department of Education official and mathematician Ze'ev Wurman finds the Common Core standards particularly deficient.

[T]he Common Core mathematics standards fail on clarity and rigor compared to better state standards and to those of high achieving countries. They do not expect algebra to be taught in grade 8 and ... their promise of college readiness rings hollow. Its college-readiness standards are below the admission requirement of most four-year state colleges.³³

Second, Sandra Stotsky, a University of Arkansas professor and member of the Common Core standards validation committee for English Language Arts, finds that national standards are defective methodologically. CCSSI was designed by "[the] same special interests that gave us the poor states' standards they were designed to replace."³⁴

Third, the Brookings Institute forecasts that proposed national standards will have "little to no impact on student learning" due to the fact that in-state performance variation is so high:

³²Stotsky, "Common Core Standards' Devastating Impact on Literary Study and Analytical Thinking."

³³Ze'ev Wurman and W. Stephen Wilson, "The Common Core Math Standards," *Education Next*, vol. 12, no. 3 (Summer 2012), <http://educationnext.org/the-common-core-math-standards/> (accessed 3/4/2013).

³⁴Sandra Stotsky, "How to Avoid Dumbing High Schools Down in Reauthorizing ESEA," Jay P. Greene's blog, February 22, 2011, <http://jaypgreene.com/tag/sandra-stotsky/> (accessed 3/4/2013).

Consider Massachusetts and Mississippi, a state [*sic*] with low scores but not at the very bottom. Their NAEP [National Assessment of Educational Progress] means differ by 25 points. Every state, including Massachusetts and Mississippi, has a mini-Massachusetts and Mississippi contrast within its own borders. That variation will go untouched by common state standards.... The empirical evidence suggests that the Common Core will have little effect on American students' achievement. The nation will have to look elsewhere for ways to improve its schools.³⁵

Academic Achievement

Coupled with parental rights and property rights, academic achievement is one of the most important elements by which a state tuition tax credit system can be judged. Parents who send their children to independent schools consistently indicate that academic quality is their primary concern.³⁶ Furthermore, this priority is not confined to educational districts known for high academic achievement or high income. A report presented by John J. Convey at the Annual Meeting of the American Educational Research Association found that the majority of the 11,000 Catholic-school parents in Washington, D.C. cited the "academic program" as their most important reason for choosing a Catholic school.³⁷ State tuition tax credits increase independent school options for many families, and if independent schools produce higher academic achievement,

³⁵ Tom Loveless, "How Well Are American Students Learning?" Brookings Institution 2012 Brown Center Report on American Education, Vol. 3, No. 1 (February 2012), http://www.brookings.edu/~media/Files/rc/reports/2012/0216_brown_education_loveless/0216_brown_education_loveless.pdf (accessed 3/4/2013).

³⁶See Edith McArthur, Kelly W. Colopy, and Beth Schlaline, "Use of School Choice Educational Policy Issues, Statistical Perspectives [Revised]," National Center for Education Statistics, 1995; ERIC document no. ED387859.

³⁷John J. Convey, "Parental Choice of Catholic Schools as a Function of Religion, Race, and Family Income," Research report presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, April 16-20 1986, 5; ERIC document no. ED269542.

then state tuition tax credits are the best policy option that will correspondingly increase academic achievement.

James Coleman, a sociologist, empirical researcher, and president of the American Sociological Association, completed studies in the late 1980s which indicated that student achievement in Catholic high schools, when controlled for the influence of family background, is equivalent to approximately one grade increase as compared to public schools. Public school students showed two years of growth in four years of schooling, while Catholic students demonstrated nearly three years of learning in the same amount of time.³⁸ The studies of Anthony Bryk, one of America's most noted educational researchers and ninth president of the Carnegie Foundation for the Advancement of Teaching, indicate discrete differences in mathematics performance between Catholic and public schools. The advantage offered by Catholic schools is equivalent to 3.2 years of additional learning over the course of a high school education, after accounting for family background, social class, and race/ethnicity.³⁹ The National Center for Education Statistics (NCES) reports that in 2011, 8th graders in private schools outscored their public school counterparts by 13 points in mathematics, 15 points in science, 15 points in writing, and 18 points in reading.⁴⁰ The difference in achievement

³⁸J. S. Coleman, & T. Hoffer, *Public and Private High Schools: The Impact of Communities*, (New York: Basic Books, 1987).

³⁹Anthony S. Bryk, Valerie E. Lee, and Peter B. Holland, *Catholic Schools and the Common Good*, (Cambridge, MA: Harvard University Press, 1993), 262-263. Measurements concerning student achievement relative to mathematics are particularly relevant because mathematics has been found to be the subject least affected by home-related factors and most influenced by classroom instruction.

⁴⁰National Assessment of Educational Progress (NAEP) Report, http://nces.ed.gov/nationsreportcard/about/private_school_quick_data.asp (accessed 3/4/2013). The most recent science scores available are from 2009. Scores were out of 500 points in mathematics and reading and 300 points in writing and science.

between public and private schools is stark, and state tuition tax credits are likely to improve academic achievement among students who are able to attend private schools.

Academic Attainment

Dr. Patrick J. Wolf, who holds an Endowed Chair in School Choice Education Reform, conducted an evaluation of the D.C. Opportunity Scholarship Program (OSP) that is particularly relevant to the issue of academic attainment. The OSP found that 82% of students offered scholarships to private schools graduated, while 70% of students denied such scholarships graduated, resulting in a 12% higher graduation rate among the former group.⁴¹ Those who benefited from the scholarships, evidenced a 21% increase in graduation rates in comparison to those who did not. With this, 91% of students who received a scholarship in the Washington, D.C. OSP graduated from high school. The survey divided participants into two statistically similar groups. The treatment group was offered scholarships, while the control group was not.⁴² The treatment group numbered 1,387 students, all of which were offered scholarships, while 921 students were in the control group and were not offered scholarships.⁴³

The results of Dr. Wolfe's study are considered reliable as The Heritage Foundation regarded its methodology as a "gold standard" for reliability.⁴⁴ Lindsey

⁴¹Lindsey Burke, "Study: DC Opportunity Scholarship Program Benefits Participants," The Heartland Institute, June 25, 2010, http://www.heartland.org/full/27877/Study_DC_Opportunity_Scholarship_Program_Benefits_Participants.html (accessed 3/4/2013).

⁴²Ibid.

⁴³Ibid.

⁴⁴Lidsey M. Burke and Rachel Sheffield, "School Choice in America 2011: Educational Opportunities Reaches New Heights". Heritage Backgrounder No. 2597.

Burke, a Will Skillman Fellow in Education at The Heritage Foundation quoted from Dr. Patrick Wolf on the importance of academic attainment: "...high school graduation is the 'Holy Grail of educational interventions in the inner city.' Moreover, Wolf notes that high school graduates live longer, earn higher wages, experience lower rates of unemployment, and are less likely to be convicted of a crime. 'If a program boosts the graduation rate, and does nothing else, it's a success.'"⁴⁵ Varied school choice programs of many forms have reliably and consistently produced increased graduation rates, and state tuition tax credits promise to produce similar results.

The evaluation of the Milwaukee Parental Choice Program (MPCP) was similar to Dr. Wolf's evaluation. John F. Witte led a team of researchers whose survey tracked MPCP 9th graders and compared them to a carefully matched sample of 9th graders enrolled in the Milwaukee Public Schools (MPS).⁴⁶ MPCP students were found to have slightly higher rates of academic attainment given that more MPCP than MPS students graduated from high school, and went onto and enroll in a four-year college. Witte's group of researchers also identified numerous other studies that support the value of high school graduation. The Milwaukee report's meta-evaluation indicated that increased academic attainment results in regular employment, aversion to criminal and other

http://www.heritage.org/research/reports/2011/08/school-choice-in-america-2011-educational-opportunity-reaches-new-heights#_ftnref123 (accessed 3/4/2013).

⁴⁵Burke, "Study: DC Opportunity Scholarship Program Benefits Participants."

⁴⁶Joshua M. Cowen, David J. Fleming, John F. Witte, and Patrick J. Wolf, "Student Attainment and the Milwaukee Parental Choice Program," March 2011, http://www.uark.edu/ua/der/SCDP/Milwaukee_Eval/Report_24.pdf (accessed 3/4/2013).

dysfunctional behavior, and increased personal income and savings.⁴⁷ Furthermore, the same meta-evaluation found that the attainment of a high school degree positively affects life expectancy, overall health and health care, wealth accumulation, increased tax revenues and economic development.

Competition in Education

Two important studies deserve consideration here relative to competition. First is a study focused on The McKay Scholarship program in Florida, which indicated that disabled students in the public school system benefited because of competition with a voucher program.⁴⁸ The authors of the report state that “rather than being harmed, public

⁴⁷Ibid. 2. See also Ellen Meara, Seth Richards, and David Cutler, “The Gap Gets Bigger: Changes in Mortality and Life Expectancy, By Education, 1981-2000,” 2008, *Health Affairs*, vol. 27, no 2; John S. Wirt, Susan P. Choy, Patrick Rooney, Stephen Provasnik, Anindita Sen and Richard Tobin, “The Condition of Education” (NCES 2004-077); U.S. Department of Education, National Center for Education Statistics; Washington D.C. Peter Muenning, “The economic value of health gains associated with education interventions,” Manuscript prepared for the Equity Symposium on *The Social Costs of Inadequate Education* at Teachers’ College, Columbia University; Cecilia E. Rouse, “Labor market consequences of an inadequate education,” paper prepared for the symposium on the *Social Costs of Inadequate Education*, Teachers’ College, Columbia University; Cecilia E. Rouse, “Labor market consequences of an inadequate education”; Pedro Carneiro, James J. Heckman, and Edward Vytlačil, “Understanding What Instrumental Variables Estimate: Estimating Marginal and Average Returns to Education” University of Chicago working paper; Jennifer Day and Eric Newburger, “The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings” US Census Bureau, Washington D.C.; Clive Belfield and Henry Levin, “The Return on Investment for Improving California’s High School Graduation Rate,” California Dropout Research Project, Santa Barbara, California; Adriana Lleras-Muney, “The Relationship Between Education and Adult Morality in the United States” *The Review of Economic Studies*, 72: 250; Clive Belfield and Henry Levin, “High School Dropouts and the Economic Loses from Juvenile Crime in California,” California Dropout Research Project. Santa Barbara, California.

⁴⁸ Jay P. Greene and Marcus A. Winters, “The Effect of Special Education Vouchers on Public School Achievement: Evidence From Florida’s McKay Scholarship Program,” Manhattan Institute Civic Report No. 52, April 2008, http://www.manhattan-institute.org/html/cr_52.html (accessed 3/4/2013).

schools respond to the challenge of exposure to school choice by improving the education they provide.”⁴⁹

The second study consisted of a large compilation of studies collected by Greg Forster, and from which he argues that private school choice inserts an element of accountability into the educational formula, which uniquely predisposes public schools to augment their academic performance given the parental option of choosing a competitive private school if the public option is deemed unsatisfactory.⁵⁰ Forster references nineteen studies in support of this argument. Seventeen found that public schools improved in the context of a voucher system, and one report demonstrated public school improvement when competing with a tax credit scholarship program. Only one study found no visible impact on public schools.⁵¹ Without private school choice options, the educational system is insulated from market forces and disincentivized from achieving higher academic performance. Nevertheless competition demonstrates that public schools can improve.

Additionally, public education transportation expenses have been steadily rising over the past fifty years. According to statistics compiled by Andrew J. Coulson, from 1949-50 the annual cost of transportation was \$184 per student, rising to \$285 in 1977-78, and peaking at \$420 in 1990-91.⁵² If public schools were able to increase efficiency and decrease transportation costs to that of the late 1970s, taxpayers would save

⁴⁹Ibid.

⁵⁰ Greg Forster, "A Win-Win Solution: The Empirical Evidence on How Vouchers Affect Public Schools," *School Choice Issues in Depth*, January 2009, <http://www.friedmanfoundation.org/downloadFile.do?id=357>.

⁵¹Ibid.

⁵² Andrew J. Coulson, *Market Education: The Unknown History*, (Transaction Publishers: Social Philosophy and Policy Center, 1999), 207.

approximately \$2.5 billion dollars annually. The market signals created by a state tuition tax credit system would help reach such goals.

Education Competition vs. Unions

Teacher unions are a component of public education, the negative effects of which can be alleviated by a state tuition tax credit system. In a recently published issue brief, James Sherk of The Heritage Foundation puts forth five reasons why unions suffocate state budgets and frustrate government employees.⁵³ First, unions inflate costs for state governments by diverting money from other budgeting needs to wage increases,⁵⁴ including pensions, which have skyrocketed in states with collective bargaining. States currently face between \$1 billion and \$4 billion in unfunded pension liabilities,⁵⁵ resulting in the crowding out of other important government priorities.⁵⁶ Sherk notes that increased pension costs have forced San Bernadino and Vallejo,

⁵³James Sherk, “Voluntary Union Representation,” The Heritage Foundation Issue Brief no. 3813, January 3 2013, http://thf_media.s3.amazonaws.com/2013/pdf/ib3813.pdf (accessed 3/4/2013).

⁵⁴*Ibid.*, citing Jeffrey Zax and Casey Ichniowski, *The Effects of Public Sector Unionism on Pay, Employment, Department Budgets, and Municipal Expenditures* (Chicago: University of Chicago Press, 1988), pp. 323–364, <http://www.nber.org/chapters/c7915.pdf> (accessed 3/4/2013). While overall budget costs do not always increase, this study found that expenses are diverted from other valuable areas in the context of collective bargaining.

⁵⁵*Ibid.*, citing The Pew Center on the States, “The Widening Gap Update,” Issue Brief, June 2012, http://www.pewstates.org/uploadedFiles/PCS_Assets/2012/Pew_Pensions_Update.pdf (accessed 3/4/2013); see also Andrew G. Biggs, “Public Sector Pensions: How Well Funded Are They, Really?” *State Budget Solutions*, July 2012, http://www.statebudgetsolutions.org/doclib/20120716_PensionFinancingUpdate.pdf (accessed January 24, 2013); see also Sarah F. Anzia and Terry M. Moe, “Public Sector Unions and the Costs of Government,” *American Political Science Association 2012 Annual Meeting Paper*, August, 2012, <http://ssrn.com/abstract=2107862>, finding that a 10% increase in union membership resulted in \$1,400 increased state pension liability per-capita.

⁵⁶*Ibid.*, citing Governor Pat Quinn (D–IL), who highlighted this result with a Web video featuring an animated snake called “Squeezy the Pension Python,” available online at <http://www.youtube.com/watch?v=H62W9iLfkv4&feature=plcp> (accessed January 24, 2013).

California, to declare bankruptcy, and induced Illinois to increase its state income tax by two-thirds from just under \$5 billion to \$7 billion.⁵⁷ Second, most unions permit union officials to perform union duties while clocked in at their government jobs. Taxes pay for union operations, freeing them to divert their funds to political activism.⁵⁸ Third, unions deduct dues directly from employee paychecks, a practice which results in disguised, coerced fundraising for causes typically unsupported by these same employees.⁵⁹ Fourth, the vast majority of union officials represent a workforce that did not consent to, or approve of, their leadership. Given these realities unions have little to no incentive to represent their members effectively and honestly, and members have little ability to hold their union officials accountable. Fifth, one-size-fits-all contracts are forced on all, which disregards the differentiation of collective bargaining preferences among union members.⁶⁰

⁵⁷Ibid., citing Monique Garcia, "Record Tax Hike Isn't Fixing Illinois' Problems," *The Chicago Tribune*, May 28, 2012, http://articles.chicagotribune.com/2012-05-28/news/ct-met-illinois-budget-20120528_1_pension-payments-income-tax-tax-hike (accessed 3/4/2013).

⁵⁸Ibid. See Mallory Factor, *Shadowbosses: Government Unions Control America and Rob Taxpayers Blind* (New York: Center Street Hachette Book Group, 2012), 19. She finds that government employees work on union business while receiving taxpayer dollars for 23 million hours a year resulting in an aggregate loss of \$1 billion in government labor.

⁵⁹See Andrew J. Coulson, *The Effects of Teachers Unions on American Education*, *Cato Journal*, vol. 30, no. 1 (Winter 2010), 155. "Of the National Education Association's \$30 million in federal campaign contributions since 1990, 93 percent has gone to Democrats or the Democratic Party. Of the \$26 million in federal campaign contributions by the American Federation of Teachers, 99 percent has gone to Democrats or the Democratic Party..." "In fact, if the NEA and AFT are taken together (not unreasonable, given that they overwhelmingly support the same party and pursue a similar agenda), they constitute the most generous source of federal political donations over the past 20 years. According to a ranking by the Center for Responsive Politics (2009), the NEA and AFT together have spent \$56 million on federal political contributions since 1989, roughly as much as Chevron, Exxon Mobil, the NRA, and Lockheed Martin combined." Citing Center for Responsive Politics "National Education Assn: Summary," www.opensecrets.org/orgs/summary.php?id=D000000064 (accessed 3/4/2013).

Due to the positive effect that state tuition tax credits have on school choice, public school union membership would decrease if it were voluntary. Budgets would be affected positively and governments would be able to enhance labor efficiency. Furthermore, wages will be tailored more closely to market pressures, benefitting both educators and students.

Overall Cost and Benefit

Taxpayer dollars expended on public schooling have risen astronomically over the last century. Andrew J. Coulson masterfully unravels education spending growth in *Market Education: The Unknown History*. Coulson cites NCES figures which indicate that national government was spending slightly more than \$500 per pupil in average daily attendance in the 1920s, with a spending increase of \$7,000 per pupil in average daily attendance in the late 1990s.⁶¹ This amounts to a government expenditure of fourteen times more per pupil for public education at the end of the twentieth century. According to Coulson, explanations for the spending growth fall into two categories: first, some argue for the necessity of increased spending based on the nature and value of school programs, and second, some dispute the spending growth itself.⁶² Both of these explanations are lacking in substance.

⁶⁰If one member prefers a higher salary to increased benefits, while another prefers a better pension to performance-based raises, neither can make such requests known as per the generic member contracts.

⁶¹Coulson, *Market Education*, 202.

⁶²*Ibid.*, 202.

Some increases in spending have been attributed to building and maintenance. Nevertheless: capital outlays fell from 14.8% in 1919-20 to 9.3% in 1992-93.⁶³ Others speculate that inflation should be calculated differently for education than for other industries. This theory's main proponents, Richard Rothstein and Karen Miles, argue that because education is labor-intensive and because labor costs can rise faster than the average rate of inflation, education spending should be compared to other labor-intensive industries.⁶⁴ Rothstein and Miles modified the special inflation index for the service sector as provided by the Bureau of Labor Statistics, but the difference between the two indices amounts to only 0.2% in actual spending growth between 1982 and 1991. The new index explains less than 2% of the growth in public school spending.⁶⁵ Furthermore, Coulson concludes that public school spending growth may be even higher than indicated above. If the CPI overstates inflation to be between 0.5% and 1.5% annually, a position taken by the Bureau of Labor Statistics and the chairman of the Federal Reserve Board, public school spending growth could be understated by as much as one-and-a-half to three times.⁶⁶ Given this, public education spending might have grown twenty-one to forty-two times since 1919-20.⁶⁷

⁶³See NCES, *Digest*, 1995, 154.

⁶⁴Coulson, *Market Education*, 205.

⁶⁵*Ibid.*

⁶⁶*Ibid.*

⁶⁷*Ibid.* This conclusion assumes the CPI error to be a constant over the entire period in question. Coulson concludes: "It is safe to say, however, that there is considerable evidence indicating that the CPI figures understate the historical growth in real education spending."

Teacher salary increases are an additional explanation for spending growth. Inflation-adjusted teacher salaries have increased by approximately one-and-a-half times between 1949-50 and 1989-90.⁶⁸ Growth in public education staffing has also increased exponentially relative to student enrollment. The Heritage Foundation cites NCES statistics that show student enrollment has increased 8% since the 1970s, while teaching staff has increased 60%, and non-teaching staff, 138%.⁶⁹ This report finds that more teachers are instructing fewer students now than at any point in American history, with no data indicating that student achievement increased as a result.

An additional metric to consider relative to school spending is the number of teachers as a percentage of school staff. Since 2000, this percentage has declined by nearly 3%, 16.5% since 1970, and 28% since 1950.⁷⁰ The administrative bloat created by a bureaucracy of administrators in the public school system cannot be overstated, nor can it be justified given that student performance has not increased proportionally.

The state tuition tax credit program instituted in Arizona in 1997 has resulted in decreased education costs on the part of the state, and increased benefits. In sixteen years scholarships totaling \$501 million have been dispensed through the program.⁷¹ A report published by the Goldwater Institute in 2003 found that in its first year of operation,

⁶⁸Ibid., 206. Increases in teacher salaries went from \$19,000 per year to \$38,000 per year.

⁶⁹Lindsey Burke, "How Education Spending is Killing Crucial Reforms," Heritage Backgrounder #2739. <http://www.heritage.org/research/reports/2012/10/how-escalating-education-spending-is-killing-crucial-reform> (accessed 3/4/2013).

⁷⁰Ibid.

⁷¹Private School Tuition Organization Income Tax Credits in Arizona: A Summary of Activity, 3. <http://www.azdor.gov/Portals/0/Reports/FY2012%20private%20schl%20tuition%20org%20crdt%20rept.pdf>. Accessed 3/4/2013 (accessed 3/4/2013).

4,248 donors received the scholarship tax credit, and after four years, participation rose to 50,000 individual donors.⁷² Reports published by the Arizona Department of Revenue indicate that growth has continued to the present day; in 2012, 76,751 individuals contributed to the state tuition tax credit program. Furthermore, 90.8% of the scholarships dispensed have come from individual contributions, indicating an extremely high participation rate and corresponding high interest among individual families.⁷³ The Goldwater Institute report supports this conclusion: “The amount of participation demonstrates a high level of awareness of and commitment to the program among taxpayers. It is particularly notable given the economic downturn in 2001.”⁷⁴ While students who attend private schools and utilize the scholarship tax credit are technically a loss on the state budget, state and localities in Arizona saved \$4,715 per child who switched to private education.⁷⁵

Nationwide public education spending has increased exponentially since its inception. The public education system lacks incentives to increase education efficiency and academic performance, and is insulated from market forces. A state tuition tax credit system would remedy these expenditure and performance issues and provide needed assistance to already stretched state and federal budgets.

⁷²Carrie Lips Lukas, “The Arizona Tax Credit: Providing Choice for Arizona Taxpayers and Students,” Goldwater Institute Policy Report no. 186 December 11, 2003, 3. http://heartland.org/sites/all/modules/custom/heartland_migration/files/pdfs/19178.pdf. Accessed 3/4/2013 (accessed 3/4/2013).

⁷³Private School Tuition Organization Income Tax Credits in Arizona: A Summary of Activity, 3.

⁷⁴Lukas, “The Arizona Tax Credit,” 6.

⁷⁵Ibid., 13.

ARGUMENTS AGAINST STATE TUITION TAX CREDIT PROGRAMS

Critics of state tuition tax credit programs attempt to leverage many arguments against the free market's effect on education. There are three mainstream arguments against school choice policy options at large and state tuition tax credits in particular.

The first is the claim that poor parents from the inner cities of America are incapable of making beneficial educational decisions for their children. In *Market Education*, Coulson cites two important studies which counter this criticism. The first indicates that poor and wealthy Catholic-school parents in Washington, D.C. rank "academic program" as the key reason for choosing independent schools.⁷⁶ The second, broader study demonstrates that the poorest families were more likely to rate academics as "very important" when compared to the wealthiest families.⁷⁷ If poor families in the inner-cities of America were given the opportunity to send their children to the school of their choice, they would tend to choose schools with high academic standards.⁷⁸ While state tuition tax credits assist parents of all economic strata, those who would benefit from the program more are low-income families. Tax credits can and often do make the difference between choosing a private school over a public school. Furthermore, the state

⁷⁶Coulson, *Market Education*, 261. See John J. Convey, "Parental Choice of Catholic Schools as a Function of Religion, Race and Family Income," Research report presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, April 16-20 1986, 5; ERIC document no. ED269542.

⁷⁷Ibid. See Patricia A. Bauch, "Can Poor Parents Make Wise Educational Choices?" in William Lowe Boyd and James G. Cibulka, eds., *Private Schools and the Public Good* (Notre Dame, IN: University of Notre Dame Press, 1981), 298. See also Virgil C. Blum, "Why Inner-City Families Send Their Children to Private Schools: An Empirical Study," in Edward M. Gaffney, Jr., ed., *Private Schools and the Public Good* (Notre Dame, IN: University of Notre Dame Press, 1981), 19. Blum says that the willingness of parents in chaotic and violent urban environments to pursue more disciplined independent schools is not surprising.

⁷⁸Ibid.

tuition tax credit program implemented in Arizona is non-means-tested, and has been shown to disproportionately assist low-income students.⁷⁹ The evidence indicates the opposite of the charges made by critics: parents from low-income economic strata in inner cities value school choice and leverage their ability to choose when given the option. State tuition tax credits can provide them that option.

Racial segregation is another weapon critics attempt to wield against state tuition tax credits, as many are presumptively skeptical of public choice options and their alleged impact on racial segregation. The Washington, D.C. study referenced above found that while both whites and African Americans cited academic program as their first reason for choosing Catholic schools, the percentage of African Americans ranking academic program first was higher than whites: 55.8% as opposed to 47.0%.⁸⁰ Andrew J. Coulson cites two persuasive reasons that should convince critics of the value of state tuition tax credits in regards to racial diversity. First, “private schools have been no more of a refuge for opponents of integration than have suburban public schools,” and second, private schools have developed into institutions that are just as racially integrated as public schools, if not more so.⁸¹ As to the first argument, public school integration did not result in increased segregation in private schools. When white flight was at its highest, private school enrollment actually decreased by 17%, indicating that those opposed to integration in public schools were not using private school choice as their alternative method of

⁷⁹See Garnett, “A Winn for Educational Pluralism.”

⁸⁰See Convey, “Parental Choice of Catholic Schools as a Function of Religion, Race and Family Income.”

⁸¹Coulson, *Market Education*, 275.

education.⁸² Furthermore, Coulson finds that income is a more accurate explanation of flight from urban schools than is race.⁸³ As to the second argument, a statistical comparison conducted over the last forty years shows that just prior to the 1970s, 93% of independent school students were non-Hispanic whites, 3.6% were African Americans, and 3.3% were other racial or ethnic groups. The percentage of African Americans in independent schools nearly tripled to 9.1% thirty years later, approximating the proportion of African Americans in the population at large (12.6%).⁸⁴ What is needed is a study that investigates the “extent to which minority and white students share the same schools and classrooms.”

A study by James Coleman, which Coulson cites, found that by the early 1980s, the least integrated schools were non-Catholic independent schools followed by Catholic schools.⁸⁵ The most racially segregated schools were public schools. This evidence

⁸²Ibid., 275-276. See also Gary Orfield, *Must We Bus?* (Washington, D.C.: The Brookings Institution, 1978), 59.

⁸³Ibid. 176. See also James Zafirau and Margaret Fleming, *A Study of Discrepant Reading Achievement of Minority and White Students in a Desegregating School District: Phase IV* (Cleveland, OH: Cleveland Public Schools, Department of Research and Analysis, 1982). Coulson argues that “...whites have more often had the option of fleeing to the suburbs, and a great many have chosen that option. So many, in fact, that *Time* magazine reported school segregation to be almost as extreme in 1996 as it was before the first mandatory busing policy was enacted in the early 1970s,” 138.

⁸⁴Ibid., citing Otto F. Kraushaar, *American Non-Public Schools: Patterns of Diversity* (Baltimore, MD: Johns Hopkins University Press, 1972), 93. See also James Coleman, “Predicting the Consequences of Policy Changes: The Case of Public and Private Schools,” in Coleman, *Equality and Achievement in Education* (Boulder, CO: Westview Press, 1990), 255-56.

⁸⁵Additional confirmation of the lack of racial segregation in public schools can be found in Greene and Mellow’s study of the level of integration in school lunchrooms cited on p. 277 of Coulson, *Market Education*. Greene and Mellow reasoned that a determination of true integration could be accomplished by examining voluntary lunchroom seating patterns as opposed to overall school enrollment figures. They found that private schools, and religious ones in particular, produce higher lunchroom racial integration than public schools do. See Jay P. Greene, “Integration Where it Counts: A Study of Racial Integration in Public and Private School

indicates that a state tuition tax credit program would not hinder progress made in racial integration in education, and instead would promote school choice and private school enrollment at large, the most effective way to integrate racially. The evidence also indicates that leaving public schools to themselves is akin to resigning future integration aspirations and possibly losing ground already made.

Lastly, critics argue that state tuition tax credit programs will cost more than public schools comparatively. Nevertheless, on average, independent schools cost half as much as average public schools.⁸⁶ Furthermore, economies of scale favor private schools, particularly Catholic schools. Increasing enrollment has been shown to decrease tuition for Catholic schools, while increasing enrollment in public schools increases per-pupil expenditures.⁸⁷

CONCLUSION

The array of benefits offered by school choice options make education policy considerations relevant for any state. Among such competing options, state tuition tax credits make a persuasive case. State tuition tax credits work with free market pressures which enhance the education marketplace, and improve student achievement, student

Lunchrooms,” paper presented to the American Political Science Association, Boston, September 1998.

⁸⁶Coulson, *Market Education*, p. 277. While nonsectarian private school costs are more than public schools, Catholic and other religious schools are far cheaper. Furthermore, the facilities of nonsectarian private schools are typically far more opulent than typical private schools – see the description of the Kiski secondary school for boys in Saltsburg, Pennsylvania on page 278 of *Market Education*. While the Kiski school is outfitted with an incredible array of athletic facilities among other things, the cost per-pupil was barely more than public schools at the time.

⁸⁷Coulson, *Market Education*, p. 278, citing Robert J. Kealey, “Balance Sheet for Catholic Elementary Schools: 1993 Income and Expenses,” Washington, D.C., National Catholic Education Association, 1994, 18; also citing Allan C. Ornstein, “School Size and Effectiveness: Policy Implications,” *Urban Review* 22 (1990): 239-45.

graduation rates, and overall performance in education. Increased parental choice also demonstrates positive outcomes. Implementing a state tuition tax credit program would lessen the strain on state budgets and loosen the grip teachers' unions have on government expenditures. Opponents of state tuition tax credits are left with little ammunition against urban families' education decision-making, racial integration, and overall cost comparisons. Given their current popularity in 11 states, and the positive momentum behind the national school choice movement, the remaining 39 states should adopt a state tuition tax credit system.

BIBLIOGRAPHY

Anzia, Sarah F., and Terry M. Moe. "Public Sector Unions and the Costs of Government." American Political Science Association 2012 Annual Meeting Paper, August 2012, <http://ssrn.com/abstract=2107862> (accessed 3/4/2013).

Arizona Christian School Tuition Organization v. Winn, 563 U.S. 1 (2011).

Arizona Rev. Statute Annotated § 43-1089 (2011). Available at <http://www.azleg.gov/FormatDocument.asp?inDoc=/ars/43/01089.html> (accessed 3/4/2013).

Bauch, Patricia A. "Can Poor Parents Make Wise Educational Choices?" in William Lowe Boyd and James G. Cibulka, eds., *Private Schools and the Public Good*. Notre Dame, IN: University of Notre Dame Press, 1981.

Belfield, Clive and Henry Levin. "The Return on Investment for Improving California's High School Graduation Rate." California Dropout Research Project. Santa Barbara, California.

_____. "High School Dropouts and the Economic Loses from Juvenile Crime in California." California Dropout Research Project. Santa Barbara, California.

Biggs, Andrew G. "Public Sector Pensions: How Well Funded Are They, Really?" State Budget Solutions, July 2012. http://www.statebudgetsolutions.org/doclib/20120716_PensionFinancingUpdate.pdf (accessed 3/4/2013).

Blum, Virgil C. "Why Inner-City Families Send Their Children to Private Schools: An Empirical Study." In Edward M. Gaffney, Jr., ed., *Private Schools and the Public Good*. Notre Dame, IN: University of Notre Dame Press, 1981.

Bryk, Anthony S., Valerie E. Lee, and Peter B. Holland, *Catholic Schools and the Common Good*. Cambridge, MA: Harvard University Press, 1993.

Burke, Lindsey. "Study: DC Opportunity Scholarship Program Benefits Participants," The Heartland Institute, June 25, 2010, http://www.heartland.org/full/27877/Study_DC_Opportunity_Scholarship_Program_Benefits_Participants.html (accessed 3/4/2013).

_____. How Education Spending is Killing Crucial Reforms. Heritage Backgrounder No. 2739. <http://www.heritage.org/research/reports/2012/10/how-escalating-education-spending-is-killing-crucial-reform> (accessed 3/4/2013).

Burke, Lindsey M. and Rachel Sheffield. School Choice in America 2011: Educational Opportunities Reaches New Heights. Heritage Backgrounder No. 2597. http://www.heritage.org/research/reports/2011/08/school-choice-in-america-2011-educational-opportunity-reaches-new-heights#_ftnref123 (accessed 3/4/2013).

Carneiro, Pedro, James J. Heckman, and Edward Vytlačil. 2003. "Understanding What Instrumental Variables Estimate: Estimating Marginal and Average Returns to Education." University of Chicago working paper.

Coleman, James. "Predicting the Consequences of Policy Changes: The Case of Public and Private Schools." In Coleman, *Equality and Achievement in Education*. Boulder, CO: Westview Press, 1990.

Coleman, J. S., & Hoffer, T. *Public and Private High Schools: The Impact of Communities*. New York: Basic Books 1987.

Convey, John J. "Parental Choice of Catholic Schools as a Function of Religion, Race and Family Income." Research report presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, April 16-20, 1986, 5. ERIC document no. ED269542.

Coulson, Andrew J. *Market Education: The Unknown History*. Transaction Publishers: Social Philosophy and Policy Center, 1999.

_____. *The Effects of Teachers Unions on American Education*. Cato Journal, vol. 30, no. 1 (Winter 2010).

Cowen, Joshua M., David J. Fleming, John F. Witte, Patrick J. Wolf. "Student Attainment and the Milwaukee Parental Choice Program." http://www.uark.edu/ua/der/SCDP/Milwaukee_Eval/Report_24.pdf (accessed 3/4/2013).

Day, Jennifer and Eric Newburger. 2002. "The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings." US Census Bureau. Washington D.C.

Factor, Mallory. *Shadowbosses: Government Unions Control America and Rob Taxpayers Blind*. New York: Center Street Hachette Book Group, 2012.

Flast v. Cohen, 392 U.S. 83 (1968).

Forster, Greg. "A Win-Win Solution: The Empirical Evidence on How Vouchers Affect Public Schools," *School Choice Issues in Depth*, January 2009. <http://www.friedmanfoundation.org/downloadFile.do?id=357> (accessed 3/4/2013).

Garcia, Monique. "Record Tax Hike Isn't Fixing Illinois' Problems." *The Chicago Tribune*, May 28, 2012, http://articles.chicagotribune.com/2012-05-28/news/ct-met-illinois-budget-20120528_1_pension-payments-income-tax-tax-hike (accessed 3/4/2013).

Garnett, Nicole Stelle. A Winn for Educational Pluralism. 121 *Yale Law Journal Online* 31 (2011). <http://yalelawjournal.org/2011/05/26/garnett.html> (accessed 3/4/2013).

Greene, Jay P. "Integration Where it Counts: A Study of Racial Integration in Public and Private School Lunchrooms." Paper presented to the American Political Science Association, Boston, September 1998.

Greene, Jay P. and Marcus A. Winters. "The Effect of Special Education Vouchers on Public School Achievement: Evidence From Florida's McKay Scholarship Program." Manhattan Institute Civic Report No. 52, April 2008. http://www.manhattan-institute.org/html/cr_52.html (accessed 3/4/2013).

Hansen, Ronald J. "High Court Upholds Arizona's Tuition Tax-Credit Program." *The Arizona Republic*. April 5, 2011.

Kealey, Robert J. Balance Sheet for Catholic Elementary Schools: 1993 Income and Expenses. Washington, D.C., National Catholic Education Association, 1994.

Kraushaar, Otto F. *American Non-Public Schools: Patterns of Diversity*. Baltimore, MD: Johns Hopkins University Press, 1972.

Lleras-Muney, Adriana. "The Relationship Between Education and Adult Morality in the United States." *The Review of Economic Studies*. 72: 250.

Loveless, Tom. "How Well Are American Students Learning?" Brookings Institution 2012 Brown Center Report on American Education, Vol. 3, No. 1 (February 2012). http://www.brookings.edu/~media/Files/rc/reports/2012/0216_brown_education_loveless/0216_brown_education_loveless.pdf (accessed 3/4/2013).

Lukas, Carrie Lips. The Arizona Tax Credit: Providing Choice for Arizona Taxpayers and Students. Goldwater Institute Policy Report no. 186 December 11, 2003. http://heartland.org/sites/all/modules/custom/heartland_migration/files/pdfs/19178.pdf. (accessed 3/4/2013).

National Assessment of Educational Progress (NAEP) Report. http://nces.ed.gov/nationsreportcard/about/private_school_quick_data.asp (accessed 3/4/2013).

National Conference of State Legislatures, Tuition Tax Credits. <http://www.ncsl.org/issues-research/educ/school-choice-scholarship-tax-credits.aspx> (accessed 3/4/2013).

Orfield, Gary. *Must We Bus?* Washington, D.C.: The Brookings Institution. 1978.

Ornstein, Allan C. "School Size and Effectiveness: Policy Implications," *Urban Review* 22 (1990): 239-45.

Loveless, Tom. "How Well Are American Students Learning?" Brookings Institution 2012 Brown Center Report on American Education, Vol. 3, No. 1 (February 2012). http://www.brookings.edu/~media/Files/rc/reports/2012/0216_brown_education_loveless/0216_brown_education_loveless.pdf (accessed April 4, 2012).

McArthur, Edith, Kelly W. Colopy, and Beth Schlaline. "Use of School Choice Educational Policy Issues, Statistical Perspectives [Revised]." National Center for Education Statistics, 1995; ERIC document no. ED387859.

Meara, Ellen, Richards, Seth, Cutler, David. 2008. "The Gap Gets Bigger: Changes in Mortality and Life Expectancy, By Education, 1981-2000." *Health Affairs*. 27 (2).

Muenning, Peter. "The Economic Value of Health Gains Associated with Education Interventions." Manuscript prepared for the Equity Symposium on The Social Costs of Inadequate Education at Teachers' College, Columbia University.

The Pew Center on the States. "The Widening Gap Update." Issue Brief, June 2012, http://www.pewstates.org/uploadedFiles/PCS_Assets/2012/Pew_Pensions_Update.pdf (accessed 3/4/2013).

Private School Tuition Organization Income Tax Credits in Arizona: A Summary of Activity. <http://www.azdor.gov/Portals/0/Reports/FY2012%20private%20schl%20tuition%20org%20crdt%20rept.pdf> (accessed 3/4/2013).

Rouse, Cecilia E. "Labor market consequences of an inadequate education." Paper prepared for the symposium on the Social Costs of Inadequate Education, Teachers College Columbia University.

Schlossberg, Herbert. *Idols of Destruction: The Conflict of Christian Faith and American Culture*. Wheaton, IL: Crossway, 1990.

Sherk, James. "Voluntary Union Representation." The Heritage Foundation Issue Brief No. 3813. January 3 2013, http://thf_media.s3.amazonaws.com/2013/pdf/ib3813.pdf (accessed 3/4/2013).

Stotsky, Sandra. "Common Core Standards' Devastating Impact on Literary Study and Analytical Thinking." The Heritage Foundation Issue Brief No. 3800. <http://www.heritage.org/research/reports/2012/12/questionable-quality-of-the-common-core-english-language-arts-standards> (accessed 3/4/2013).

_____. “How to Avoid Dumbing High Schools Down in Reauthorizing ESEA.” Jay P. Greene’s blog, February 22, 2011, <http://jaypgreene.com/tag/sandra-stotsky/> (accessed 3/4/2013).

Surrey, Stanley S. Tax Incentives as a Device for Implementing Government Policy: A Comparison with Direct Government Expenditures. 83 *Harvard Law Review* 705, 711 (1970).

“The Year of School Choice.” *The Wall Street Journal*. July 5, 2011.

Webster, Noah. *An American Dictionary of the English Language 1828*. West Valley City: Waking Lion Press, 2010.

West Virginia Board of Education v. Barnette, 319 U.S. 624, 642 (1943)

Wirt, John S. Susan P. Choy, Patrick Rooney, Stephen Provasnik, Anindita Sen and Richard Tobin 2004. “The Condition of Education”(NCES 2004-077). U.S. Department of Education, National Center for Education Statistics. Washington D.C.

Wurman, Ze’ev and W. Stephen Wilson. “The Common Core Math Standards.” *Education Next* vol. 12, no. 3 (Summer 2012). <http://educationnext.org/the-common-core-math-standards/> (accessed 3/4/2013).

Zafirau, James and Margaret Fleming. *A Study of Discrepant Reading Achievement of Minority and White Students in a Desegregating School District: Phase IV*. Cleveland, OH: Cleveland Public Schools, Department of Research and Analysis, 1982.

Zax, Jeffrey and Casey Ichniowski. *The Effects of Public Sector Unionism on Pay, Employment, Department Budgets, and Municipal Expenditures*. Chicago: University of Chicago Press, 1988. <http://www.nber.org/chapters/c7915.pdf> (accessed 3/4/2013).

Zelinsky, Edward A. Are Tax “Benefits” Constitutionally Equivalent to Direct Expenditures? 112 *Harvard Law Review* 379

_____. Winn and the Inadvisability of Constitutionalizing Tax Expenditure Analysis. 121 *Yale Law Journal Online* 25 (2011). <http://yalelawjournal.org/2011/05/26/zelinsky.html> (accessed 3/4/2013).