



TEACHER JOBS AT RISK

Executive Office of the President

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Teacher Jobs at Risk

"The wrong way to increase productivity in an era of tight budgets is to cut back in a manner that damages school quality and hurts children. I'm talking about steps like reducing the number of days in the school year, slashing instructional time spent on task, eliminating the arts and foreign languages, abandoning promising reforms, and laying off talented, young teachers."

—U.S. Secretary of Education Arne Duncan, November 17, 2010

America's education system has always been one of our greatest sources of strength and global economic competitiveness, as well as the engine of incredible progress in science, technology and the arts. We cannot expect to train our children for the high-skilled jobs of today, or for the opportunities of the future, without investments in a world-class education system.

But the severe recession from which we are still recovering has caused serious budget problems for many state and local governments, which fund the vast majority of the costs of public elementary through high school education. What this means is that school districts have been forced to make difficult decisions. Over the past twelve months, despite private-sector job growth of 1.7 million, local governments have reduced the number of teachers and education personnel they employ by nearly 200,000 people, about two thirds of all local government job losses during this period.

The American Jobs Act Could Prevent Hundreds of Thousands of Layoffs, and Allow Schools to Rehire Thousands More:

- Nearly 300,000 Educator Jobs Have Been Lost Since 2008, 54 Percent of all Job Losses in Local Government:** Local governments shed nearly 300,000 education jobs between August 2008 and August 2011. By another measure, employment of teachers fell by 7.2 percent between 2007-08 and 2010-11.
- Local Governments Have Lost Nearly 200,000 Education Jobs Over the Past Year:** Over just the past 12 months, local government education employment has fallen by 194,000 jobs.
- State and Local Funding Cuts Put As Many as 280,000 Teacher Jobs At Risk Next Year:** In the four largest states, budget reductions threaten teacher jobs and key funding for schools. In New York City alone, nearly 780 employees were expected to lose their jobs by October. In California, budget triggers may shorten the school year. And in Texas and Florida, tens of thousands of teachers could be laid off.
- The American Jobs Act Will Support Nearly 400,000 Education Jobs—Preventing Layoffs and Allowing Thousands More to Be Hired or Rehired:** The President's plan will more than offset projected layoffs, providing support for nearly 400,000 education jobs—enough for states to avoid harmful layoffs and rehire tens of thousands of teachers who lost their jobs over the past three years.

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And in the coming school year, without additional support, many school districts will have to make another round of difficult decisions. As a result of state and local funding cuts, as many as 280,000 teacher jobs could be at risk in the coming year. Unless they receive federal assistance, many school districts will be forced to reduce the number of teachers in their classrooms or turn to other measures such as shortening the school year or cutting spending on schoolbooks and supplies.

President Obama believes that America cannot win the future if its teachers are not where they belong—at the chalkboards or the Smart Boards in our classrooms, teaching our nation’s children. That’s why he put forward a plan—the American Jobs Act—that will provide support for nearly 400,000 education jobs, enough for states to avoid harmful layoffs, rehire tens of thousands of teachers who lost their jobs over the past three years, preserve or extend the regular school day and school year, and support important after-school activities.

State Budget Shortfalls Have Led to Significant Cuts in Education Spending

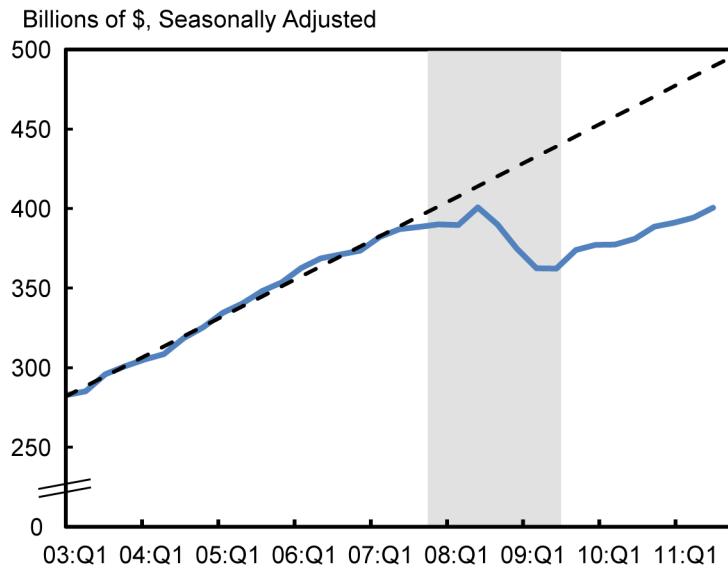
States are still reeling from the recession and their budget woes are having a devastating impact on schools and students. That is why the federal government needs to provide more emergency education funding to states and localities.

The severe recession from which our country is still recovering has caused serious budget problems for many state and local governments. As shown in Figure 1, the revenue received by state and local governments from sources other than the federal government, which had been increasing at a steady pace prior to the recession, fell a precipitous 9.6 percent between the middle of 2008 and the middle of 2009. It took until the second quarter of this year for state and local revenue to return to its mid-2008 level (in nominal terms), and it remains well below what would have been predicted had revenue growth kept pace with its pre-recession trend. The large drop in revenue from non-federal sources forced states and localities to reduce expenditures, to seek increases in revenue from other sources (including the federal government), or both.

Indeed, as shown in Figure 2, these problems persist. State budget shortfalls totaled over 100 billion dollars in each of fiscal years 2009, 2010, and 2011, and shortfalls are projected to continue into the future, even as the economy continues to recover from the recession.

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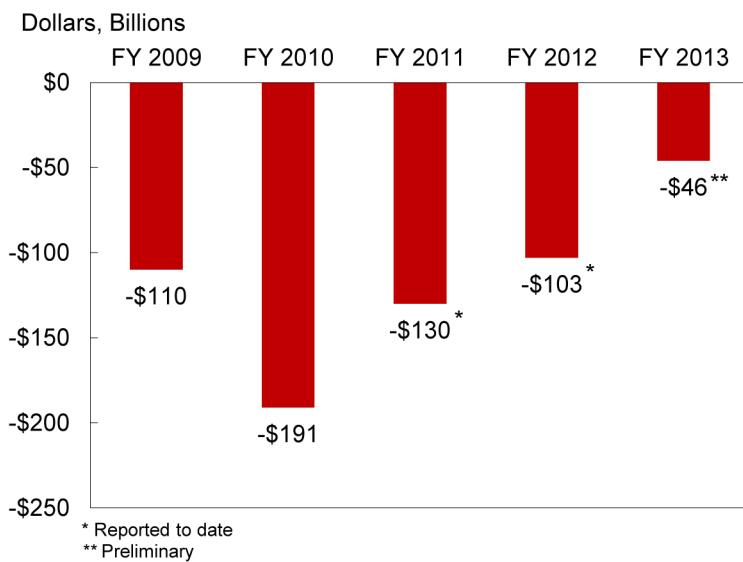
Figure 1: State and Local Government Revenue Less Federal Grants



Source: Bureau of Economic Analysis.

Note: Shaded area represents recession.

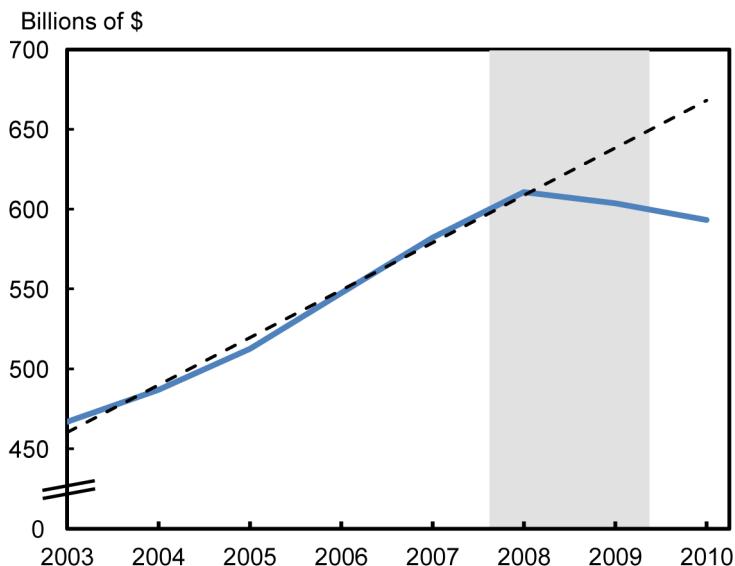
Figure 2: State Budget Shortfalls



Source: McNichol, Oliff and Johnson, 2011

State and local government spending on elementary and secondary education was not spared from the impact of the recession. The vast majority of the costs of public elementary and secondary education traditionally have been borne by state and local governments, with the federal government accounting for a much smaller fraction. For example, in 2007-08, state and local governments accounted for 48 percent and 44 percent of total spending on elementary and secondary education, respectively, while the federal government accounted for only 8 percent (National Center for Education Statistics, 2010). As the budget problems of states and local governments have worsened, reductions in funding for elementary and secondary education have followed, with serious consequences for many school districts. As shown in Figure 3, total nominal state and local spending for elementary and secondary education fell in both 2009 and 2010. This is unprecedented—prior to 2009, nominal spending by state and local governments on elementary and secondary education had increased every year since these data first began to be recorded in 1959.

Figure 3: State and Local Spending on Elementary and Secondary Education



Source: Bureau of Economic Analysis

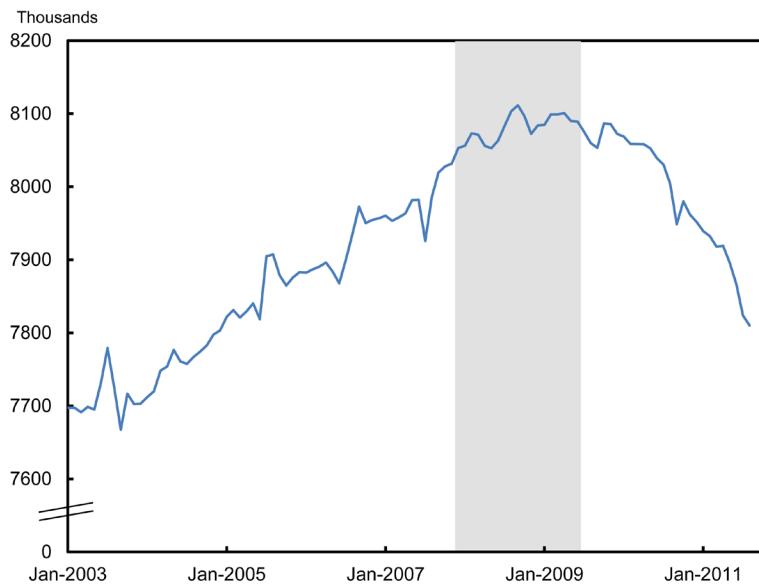
Note: Shaded area represents recession.

Reductions in State and Local Education Spending Have Resulted in the Loss of Nearly 300,000 Education Jobs Over the Last Three Years

Not surprisingly given the cuts in funding that have occurred, the number of jobs in public elementary and secondary schools has fallen sharply. Figure 4 displays data on employment in local government education from the monthly Bureau of Labor Statistics (BLS) employer survey. After having trended upwards for decades, local government education employment began to fall in 2009. As shown in Figure 5, local government education employment dropped by 44,000 jobs in the year ending August 2009, by 56,000 jobs in the year ending August 2010, and by 194,000 jobs in the year ending August 2011, a cumulative loss of 293,000 jobs.

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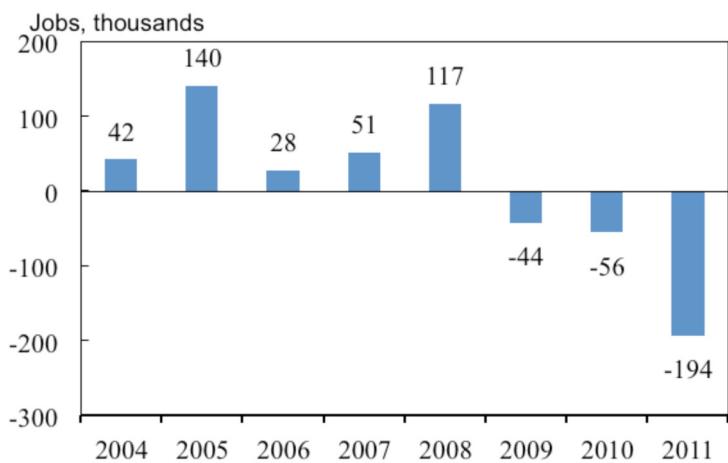
Figure 4: Local Government Employment in Educational Services



Source: Bureau of Labor Statistics

Note: Shaded area represents recession.

Figure 5: Year-Over-Year Change, Local Government Employment in Educational Services



Source: Bureau of Labor Statistics

Note: Based on August levels.

Another source of information on education employment is the Current Population Survey (CPS), a large household survey conducted monthly by the Census Bureau for the Bureau of Labor Statistics. While not strictly comparable to the data from the employer survey, the CPS data paint an overall picture that is similar to that reflected in the monthly employer survey. In the CPS data, local government elementary and secondary employment decreased by several hundred thousand between the 2007-08 and 2010-11 school years. Moreover, the CPS data allow us to examine the occupations in which people are employed. Between 2007-08 and 2010-11, employment of teachers declined by 7.2 percent, with cuts concentrated among elementary and middle school teachers. Employment in other education jobs, including teacher assistants, guidance counselors, and others, declined by 8.3 percent. Reductions in spending on pre-K-12 education have had a direct and profound effect on the number of teachers in the classroom.

Education Spending Cuts Force School Systems to Make Choices That Impact the Learning Environment for Students

None of the choices available to school systems that must deal with losses in funding for teachers is good. Some districts have chosen to increase class sizes; others have eliminated summer school programs and after-school programs, or discontinued instruction in subjects such as art and music, all in an effort to make ends meet.

Especially in an era of intensifying global competition, in which it is critical that all students leave school ready for work and further learning, these cuts are troubling. Consider, for example, what we know about the effects of class sizes for young students. The most convincing scholarly research on class sizes, based on experimental evidence from the Tennessee Student Teacher Achievement Ratio (STAR) project, shows that smaller class sizes in the early primary years not only produce short term gains in student achievement (Dynarski et al., 2011) but also raise the likelihood that students will attend and graduate from college and study STEM subjects (Dynarski et al, 2011).^{1,2}

Additionally, research showing the importance of summer learning losses as a key factor in the achievement gap between socioeconomically disadvantaged students and their classmates makes the case for keeping at-risk students in school during the summer (Cooper et al, 1996; Alexander, Entwistle and Olson, 2007). Other reports show that students who participate in after-school programs have lower delinquency rates and lower pregnancy rates (American Youth Policy Forum, 2006). And while subjects such as art and music may be viewed as targets for cuts, such courses may be important for keeping students engaged in school and preventing dropouts (Deasy, 2002).

¹ Chetty et al. (forthcoming) also find evidence from project STAR that small class sizes raise the likelihood that students are enrolled in college at age 20.

² Studies of the effects of class size on student outcomes in non-experimental settings are handicapped by correlations between class size and other socioeconomic factors. Authors analyzing non-experimental data have reached conflicting conclusions, with some studies failing to find positive effects of smaller class sizes (e.g., Hanushek, 1998). Other studies that have examined the same data, however, have concluded that smaller class sizes have beneficial effects that are “large enough to be of practical importance” (Hedges, Laine and Greenwald, 1994).

The Recovery Act and Education Jobs Fund Helped Avoid an Even Worse Situation

The fallout from the recession could have been far worse. Recognizing the financial difficulties that many state and local governments were experiencing, in 2009 and 2010 the Obama Administration proposed targeted assistance to preserve critical state and local functions and the Congress acted on the Administration's proposals. States used approximately \$40 billion as general support for public elementary and secondary education—about \$30 billion through the State Fiscal Stabilization Fund (SFSF) established as part of the American Recovery and Reinvestment Act (ARRA) and another \$10 billion through the Education Jobs Fund. ARRA also provided additional funds for existing federal programs such as the \$10 billion in added Title I funding to school districts with high numbers or percentages of poor children and the \$12 billion for IDEA programs for infants, toddlers, children and youth with disabilities.

This funding has made an enormous difference. A recent report from the independent United States Government Accountability Office (GAO) concluded that "teacher retention was the primary use of Recovery Act education funds" (GAO, 2011). Based on the allocation of the SFSF and Education Jobs Fund money across states combined with information on average teacher compensation in each state, we estimate that SFSF provided sufficient funding to keep 288,000 teachers on the job for a year and that the money appropriated for the Education Jobs Fund was sufficient to keep 134,000 teachers on the job for a year.³ Because some of the funding provided has been spent out over more than one year, the impact on point-in-time levels of employment has been smaller than these estimates of job-years supported. Still, the availability of this funding undoubtedly helped to prevent many tens of thousands of teacher layoffs that otherwise would have occurred.⁴

Additional Resources Are Needed to Prevent Further Teacher Layoffs

Looking forward, it is painfully clear that we are not yet out of the woods. Although the fiscal situation of state and local governments has improved, they continue to feel considerable financial pressure. Of the emergency federal assistance provided to states to date during the economic recovery to support public elementary and secondary education, only about \$4 billion remains unspent. Unless action is taken, significant cuts in state and local spending on education will continue and many tens of thousands of teacher jobs again will be at risk.

As already noted, the context for spending on elementary and secondary education is one in which states continue to wrestle with budget shortfalls. As already shown in Figure 2, the largest state budget shortfalls were experienced in fiscal year 2010, when states confronted a shortfall totaling \$191 billion.

³ Money appropriated for the Education Jobs Fund was available to spend only on employee compensation; the rules governing expenditures of ARA money were more flexible.

⁴ Another source of job creation estimates comes from quarterly reports sent by the states. Rather than being based on allocated funds, the reporting is based on funds that have actually been spent to date. Differences also may arise if teachers or other education personnel supported using the federal funds earn salaries different than the state average teacher salaries. For example, if funds were used to hire new teachers who are generally paid less than the average teacher, the reports could suggest that more jobs were supported.

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Things improved somewhat in fiscal year 2011 (shortfall of \$130 billion) and should be slightly better in fiscal year 2012 (projected shortfall of \$103 billion), but state budgets clearly remain tight.

Earlier this year, we developed estimates of the number of education jobs at risk in the 2011-12 school year. The starting point for these estimates was information about projected state budget shortfalls compiled through early June by the Center on Budget and Policy Priorities (McNichol, Oliff and Johnson, 2011). All of our calculations assumed that state budget shortfalls would be addressed by a combination of spending cuts and revenue increases. The calculations also assumed that cuts in spending would be applied proportionally across major budget categories, so that support for elementary and secondary education would receive the same percentage cut as other parts of the state budget and that, within the education budget line, salaries of school personnel would be cut in proportion to their share of total spending on K-12 education. In many cases, in states that are experiencing budget problems, local governments also are being squeezed. We allowed for the possibility that, in states that are reducing their support for education, reductions in state support might be accompanied by reductions in local spending. These spending reduction numbers then were converted into estimates of educator jobs at risk based on estimates of average teacher compensation by state. These calculations implied that, if spending reductions had their full negative impact on education staffing, up to 280,000 educator jobs across the country would be at risk in the 2011-2012 school year.

And while it is still early in this school year, recent reports from the four largest states show more teacher jobs at risk on into the future, with states and cities continuing to face difficult choices. Over 700 education department employees in New York City were expected to lose their jobs by October (Santos, 2011b), and in the face of budget cuts, "principals have trimmed after-school programs, shrunk their support staffs and tightened their schools' use of things like printing paper, markers and Post-it notes" (Santos, 2011a). In Texas and Florida, substantial budget cuts reportedly threaten tens of thousands of public education jobs (Chea, 2011; Garrett, 2011; Weber, 2011). California's budget has seen revenue below projections, and reductions in the school year may be triggered if they continue to fall short (California Department of Finance, 2011a and 2011b). Across the entire country, of 24 states reporting data, accounting for about two-thirds of the nation's school-age population, 21 states say they will be providing less funding per student to local school districts in the upcoming year (Oliff and Leachman, 2011).

The American Jobs Act: Putting Teachers Back to Work

To provide a jolt to the economy and create jobs, the President recently unveiled the American Jobs Act. The purpose of the American Jobs Act is simple: put more people back to work and put more money in the pockets of working Americans. And it would do so without adding a dime to the deficit. One of the central components of the American Jobs Act is funding to avoid and reverse teacher layoffs now, and to provide support for the re-hiring and hiring of educators.

Specifically, the American Jobs Act will invest \$30 billion to support state and local efforts to retain, rehire, and hire early childhood, elementary, and secondary educators. If enacted, these teacher stabilization funds would help prevent layoffs and support the hiring or re-hiring of nearly 400,000 educators, including teachers, guidance counselors, classroom assistants, afterschool personnel, tutors, and literacy and

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math coaches. These funds will ensure that schools are able to keep teachers in the classroom, preserve or extend the regular school day and school year, and maintain important afterschool activities.

Table 1 shows the number of education jobs supported by the American Jobs Act in every state. The impact of this funding is clear:

- In the states with the largest numbers of students, the American Jobs Act will support tens of thousands of educator jobs—California (37,300), Florida (25,900), Illinois (14,500), New York (18,000) and Texas (39,500).
- Funding is targeted to the school districts most in need of support across the country, especially those with a high share of students living in poverty. The Department of Education projects that New York City will receive around \$950 million, Los Angeles Unified School District will receive around \$570 million, Dade County School District will receive around \$250 million, and Houston and Dallas Independent School Districts will each receive more than \$100 million.
- Even in states with smaller student enrollments, the American Jobs Act will have a significant impact—supporting over a thousand educator jobs in states like Montana (1,400), Arkansas (4,100), Nevada (3,600), and Iowa (4,100). Medium-size school districts like those in Wake County, North Carolina and Nashville, Tennessee will receive funding ranging from \$50 million to \$75 million.

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Table 1: American Jobs Act Funding and Educator Jobs Supported, by State

	Funds Allocated	Jobs Supported
Alabama	\$451,477,775	7,000
Alaska	\$70,483,533	900
Arizona	\$625,502,087	9,700
Arkansas	\$278,349,252	4,100
California	\$3,621,259,606	37,300
Colorado	\$478,613,481	7,000
Connecticut	\$336,337,446	3,800
Delaware	\$82,997,471	1,100
District of Columbia	\$45,109,614	500
Florida	\$1,669,491,158	25,900
Georgia	\$956,651,560	12,800
Hawaii	\$122,264,776	1,500
Idaho	\$159,774,914	2,500
Illinois	\$1,235,498,910	14,500
Indiana	\$629,292,696	9,100
Iowa	\$287,247,469	4,100
Kansas	\$278,459,287	4,300
Kentucky	\$406,537,820	6,100
Louisiana	\$434,370,214	6,300
Maine	\$117,334,751	1,800
Maryland	\$541,737,372	6,000
Massachusetts	\$591,820,857	6,300
Michigan	\$945,525,188	11,900
Minnesota	\$504,350,564	6,900
Mississippi	\$290,347,609	4,600
Missouri	\$565,157,036	9,100
Montana	\$90,146,401	1,400
Nebraska	\$176,136,404	2,800
Nevada	\$258,342,150	3,600
New Hampshire	\$120,930,000	1,700
New Jersey	\$831,130,335	9,300
New Mexico	\$200,107,487	3,100
New York	\$1,769,829,552	18,000
North Carolina	\$900,280,219	13,400
North Dakota	\$59,889,978	1,000
Ohio	\$1,093,811,231	14,200
Oklahoma	\$359,581,881	5,900
Oregon	\$350,667,031	4,600
Pennsylvania	\$1,155,321,669	14,400
Rhode Island	\$94,297,222	1,100
South Carolina	\$429,529,001	6,400
South Dakota	\$77,628,214	1,600
Tennessee	\$596,010,340	9,400
Texas	\$2,565,540,825	39,500
Utah	\$302,990,907	5,100
Vermont	\$55,502,503	800
Virginia	\$742,337,325	10,800
Washington	\$627,841,290	8,500
West Virginia	\$162,820,273	2,600
Wisconsin	\$536,025,185	7,400
Wyoming	\$52,462,346	700
Total		392,400

Source: Administration calculations using information on state funding levels from Department of Education.



References

- Alexander, Karl L, Doris R. Entwistle and Linda Steffel Olson. 2007. "Lasting consequences of the summer learning gap," *American Sociological Review*, 72 (April), pp. 167-180.
- American Youth Policy Forum, 2006. *Helping Youth Succeed Through Out-of-School Time Programs*. Washington, DC: American Youth Policy Forum.
- California Department of Finance. 2011a. "Finance Bulletin, September 2011." Accessed online at http://www.dof.ca.gov/finance_bulletins/2011/september/ on October 3, 2011.
- California Department of Finance, 2011b. "Enacted Budget Detail, 2011-2012." Accessed online at <http://www.ebudget.ca.gov/Enacted/agencies.html> on October 3, 2011.
- Cheia, Terence. 2011. "Schools struggle to recover amid years of cuts," Associated Press, May 25. Accessed online at <http://news.yahoo.com/schools-struggle-recover-amid-years-cuts-180855528.html> on October 3, 2011.
- Chetty, Raj, John N. Friedman, Nathaniel Hilger, Emmanuel Saez, Diane Whitmore Schanzenbach, and Danny Yagan. Forthcoming. "How does your Kindergarten classroom affect your earnings? Evidence from Project STAR," *Quarterly Journal of Economics*.
- Cooper, Harris, Barbara Nye, Kelly Charlton, James Lindsay, and Scott Greathouse. 1996. "The effects of summer vacation on achievement test scores: A narrative and meta-analytic review," *Review of Educational Research*, 66(3), pp. 227–268.
- Deasy, Richard J. , ed. 2002. *Critical Links: Learning in the Arts and Student Academic and Social Development*. Washington DC: Arts Education Partnership.
- Dynarski, Susan, Joshua Hyman and Diane Whitmore Schanzenbach. 2011. "Experimental evidence on the effect of childhood investments on postsecondary attainment and degree completion," mimeo.
- Garrett, Robert T. 2011. "Governor signs budget, touts lack of tax hike." *Dallas Morning News*, June 18. Accessed online at <http://www6.lexisnexis.com/publisher/EndUser?Action=UserDisplayFullDocument&orgId=574&topicId=25132&docId=l:1439993625&start=5> on October 3, 2011.
- Hanushek, Eric A. 1997. "Assessing the effects of school resources on student performance: an update" *Educational Evaluation and Policy Analysis*, vol. 19(2), pp. 141-64.
- Hedges, Larry V., Richard D. Laine, and Rob Greenwald. 1994. "Does money matter? A meta-analysis of studies of the effects of differential school inputs on student outcomes," *Education Researcher*, vol. 23 (April), pp. 5-14.
- McNichol, Elizabeth, Phil Oliff and Nicholas Johnson. 2011. "States continue to feel recession's impact," Center on Budget and Policy Priorities Brief. June 17.

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- National Center for Education Statistics. 2010. *Digest of Education Statistics*. Washington DC: Government Printing Office. Accessed online at http://nces.ed.gov/programs/digest/d10/tables/dt10_180.asp on October 1, 2011.
- Oliff, Phil and Michael Leachmann. 2011. "New school year brings steep cuts in state funding for schools," Center on Budget and Policy Priorities Brief, September 9, 2011.
- Santos, Fernanda. 2011a. "Lessons in austerity: How city principals make budget work." *New York Times*, August 17. Accessed online at <http://www.nytimes.com/2011/08/18/nyregion/five-new-york-city-school-principals-talk-budget-cuts.html?pagewanted=all> on October 3, 2011.
- Santos, Fernanda. 2011b. "School layoffs about to fall heaviest on the poorest and most struggling." *New York Times*, October 2. Accessed online at http://www.nytimes.com/2011/10/03/nyregion/nyc-layoffs-to-hit-poorest-schools-hardest.html?_r=2 on October 3, 2011.
- United States Government Accountability Office. 2011. "Recovery Act Education Programs," GAO-11-804, September.
- Weber, Paul J. 2011. "Shrinking Texas school payrolls add to unemployed." Associated Press, September 29. Accessed online at http://hosted2.ap.org/APDEFAULT/Article_2011-09-29-Perry-Texas%20School%20Layoffs/id-p91fb672799604dd0a9dca76aa34dfc35 on October 3, 2011.