

The pros and cons of education budget cuts: An investigative study

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ABSTRACT

A review of the effects of past education budget cuts is important to review in order to better understand necessary modifications to meet the rising need for quality education in the United States. Multiple positive and negative outcomes are examined in order to balance the polar principles of education budget cuts. The positive outcomes are more attention on gas consumption by buses, improved paper reduction processes through technology utilization, application of energy efficient practices, implementation of environmentally friendly practices, and precise evaluation of educational and instructional time. The negative aspects of education budget cuts include loss of exposure to education, increased disparity between students of low income and high income, loss of quality of education, elimination of special need programs, and increased costs to parents. The educational leaders, Arne Duncan, Secretary of Education and the National State Boards of Education should address the negative effects of the current, No Child Left Behind accountability system as they prepare to implement the new Elementary and Secondary Education Act of 2011 and review the accountabilities that affect the quality of education and college preparedness of students while decreasing the disparity between low income and high income students.

Keywords: Education, Budget Cuts, No Child Left Behind Act, Efficiencies in Higher Education

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INTRODUCTION

Education is affected by budget cuts as it has been for many years in the United States. With each new administration in the White House, new policies are enacted for accountability and new legislation passed for increasing budget cuts in education is prevalent (Education Budget, 2003). The positive outcomes of education budget cuts are evident as a short term bandage on the wound of past and current poor financial and operational planning within our government. Budget cuts prompt the need for school districts nationwide to examine how their funds are distributed, allowing many facets of the educational system to formulate plans of action to accommodate the needs of the budget. Generating some scrutiny; however, many school districts have launched a new initiative on improving education and educational services. Many schools are not only adapting to eminent budget cuts, but they are thriving on new resources and technology that position students on the brink of the future (Fisher, 2010).

Some schools have also begun to adapt to the budget change by altering the number of days schools are in session each week. This has not only lowered costs, but many speculate it may potentially change the culture of teaching (Reid, 2010). Conventional teaching methods may become challenged by more effective and efficient modern techniques. Consolidation of schools using more efficient bus routes can greatly decrease the amount of money spent on fuel. Despite the positive outcomes of education budget cuts many negative outcomes still exist.

With the 2011 fiscal year deficit expected to reach an all-time high of \$1.48 trillion (Reuters, 2011), education will be taking another hit for additional cuts, but at what cost? In 2001 the No Child Left Behind Act (NCLB) was implemented. In its purest form, it was a policy designed to increase the availability of quality education to children of lower income and special needs while holding institutes receiving federal funding accountable for ensuring this policy was implemented (Rashid & Johnson, 2011). The NCLB Act embraced the premise that all children shall have equal access to quality education. Unfortunately this policy has fallen short. In his 2011 State of the Union Address, President Barack Obama stated “One in four high school students do not graduate from high school” (Obama, 2011, para. 13). That statement in itself should be a driving force against any further cuts in the budget for our educational system.

On average, students in the United States spend thirty-six weeks in school. According to the Center of Education Policy (2007), 99% of educational institutes have aligned their curriculum to match the state testing requirements. Many schools have reported a minimum of three weeks are spent preparing students with practice tests and the actual testing process. If this were calculated over grades one through twelve, over 36 weeks of education is lost to our students for accountability testing. This is equivalent to one year of their educational life. Could state accountability measures be realigned and measured in a different form that does not take away from true educational opportunities of American students?

Many states have proposed or implemented budget cuts to programs geared toward special needs students such as Head Start and Special Education while others are eliminating food programs (breakfast) and decreasing the funding to free or reduced lunch programs as a means to save money (Dority, 1993). With children of low income families being the students with the most needs, cutting or decreasing the food programs will cause an increase in costs to parents. Decreasing Head Start programs will create an even greater educational gap between low income and high income students (Dority, 1993).

Several states have decidedly decreased the quality of education by closing institutions and consolidating schools. According to the STAR project (1996 – 1999) there is a definitive

difference among schools with varying student/teacher ratios. Consolidation of schools leads to overcrowding, larger student/teacher ratios and a decrease in one on one attention to students. As of March 15, 2011, California has given a statewide pink slip to more than 20,000 teachers. Government leaders such as California's Jerry Brown need to reassess the measures taken to reduce costs in a manner that does not decrease the quality of education the students receive.

Additional education budget cuts across the United States include cuts to resource funding. Many institutes have elected to close libraries or cut textbook costs. According to the California Teachers Association, Jerry Brown has included in his 2011 Education Budget, a decrease in textbook funding by 77% (Guy, 2011). This will further expand the gap among low income and high income students as low income students will not be able to afford the textbooks, supplies and/or resources as the higher income students can.

Furthermore, with the increase in budget cuts to education comes an increase in costs to parents. This increase is felt across all educational levels from Kindergarten through Post-Secondary education. With state post-secondary educational institutes also feeling the wrath of cuts, many have increased tuition prices. With lower Pell Grant availability down \$3 billion in 2011 (USDOE, 2010) and the tuition increases many universities are employing, there exists an increase to parental/student funding. For low income families this may mean an inability to obtain a higher education due to a lack of funding opportunities.

This study will explore the positive and negative effects of education budget cuts in an investigative manner. This analysis will pay close attention to balancing the positives and negatives of education budget cuts where possible alternatives are examined. Additionally, the reader will juxtapose the varying effects of education budget cuts, thus drawing a conclusion to this phenomenon.

DISCUSSION

The Positive Effects of Education Budget Cuts

When budget cuts are mentioned, many speculate the negative impact it will inevitably have on a particular matter. In most cases, this assumption is justified; however, some may argue the contrary. For instance, contemplate the impact a lower budget will have on education. Though its affect may be detrimental to schools, it could also be argued that a budget cutback forces the school body to be more analytical of its processes (Fisher, 2010). For most educators, which include superintendents, board of education, administrators and teachers; this provides them an opportunity to "think outside the box" in terms of how efficiently their money is spent on educational services. The end result could equate to improved teaching methods that are more environmentally friendly and cost efficient (Gantt, 2010, Harpalani, 2010). Some of these methods could include more online classes, Eyring (2011), argues. A junior at Brigham Young, Eyring says that if the United States is to complete globally, they we just develop cost-efficiencies that focuses on a fishbone policy that includes online, pathway, transfers, concurrent enrollment and a modular curriculum (Eyring, 2011).

One positive impact that budget cuts could have on education is that it will force schools to look at areas where they are spending large sums of money and find more efficient ways of using it; the extraordinary amount of gas consumed by schools is an area of concern. A large sum of money is wasted on gas to fuel buses that take complex and outdated routes to transport students to and from school. According to The Augusta Chronicle, more efficient bus routes are

being evaluated and updated to satisfy this issue. With the rising gas prices, schools are finding ways to actually save money by improving bus routes and shortening the amount of distances traveled (Hobbs, 2009). This could prompt the evaluation of redistricting and its impact on saving money and improving school admissions. Due to the impending budget cuts on education, issues such as bus routes are evaluated and improved to accommodate the demands. In addition, consolidating schools means fewer buses on the road and a decrease in fuel usage and lower emissions. Universities across the United States have shuttle-bus transportation that transports students to and from their automobiles and extended campuses that typically travel at less than 25% capacity. These inefficiencies Eyring (2011), notes should be studied for better utilization and cost-efficiency.

Another positive impact from budget cuts is the focus of schools on paper usage. Lackie (2009), blogs that a typical teacher sends multiple sheets of paper home with each student every day, particularly in elementary schools. When this is multiplied by the number of students in a classroom, the outcome reveals an enormous amount of paper distributed daily. Much of this wasted paper can be saved by using the technology of the computer accompanied by an Intranet. Lackie compares this efficiency to the cost of a web portal which uses a free open source solution such as Moodle. Adding the maximum of \$30 per month in hosting, this could save a school nearly \$365 per month by using technology as an alternative. Districts such as the Shasta Union High School District stopped mailing paper copies of the board meeting agendas as a way to cut costs. Margea and Margea (2011), add that not only is money saved by using open source software such as Moodle but that compatibility with most other programs will be realized. It has been reported that the district has saved between \$8,000 and \$9,000 (Rogers, 2009). Al Musawi (2011), corroborates Lackie's blog, as well as Margea and Margea (2011) with scientific research and although much of these savings may "depersonalize" education with the lack of real people (p. 131) and materials it will still send out an effective message of economization.

The saving of paper and more prominent usage of computers also impacts students on a different level. Since we are at a rapidly growing era of informational technology, known as Moore's Law, the usage of computers will become more necessary. These skills could be incorporated into the curriculum at an early age which will prepare students for the future. At one end of the spectrum, money is being spent, at the other end students will be prepared for the future. According to Terry Cook, Principal of South Warren High School in Warren County, Kentucky, trials will be run during the 2011-2012 school year on providing Apple iPad computers in lieu of textbooks and paper assignments to lower printing costs and increase student technology use with the added benefit of increased natural resources (T. Cook, personal communications, May 4, 2011).

Another way that budget cuts can be positive is that it forces schools and teachers to enact energy efficient strategies to cut costs. The California Energy Commission's Energy Tips for Schools (2011), mentions techniques that schools are using to save energy and costs due to the budget cuts. Schools turning out the lights when classrooms are empty or installing occupancy sensors have saved energy and costs in electricity. Other measures such as closing the doors and lowering the thermostat settings have lessened energy consumption and cost. These practices are positive for schools and excellent lessons for the students to get in the habit of applying. Without the inevitability of budget cuts, schools would be less apt to consider these energy efficiency methods.

The final impact budget cuts may have on education is that it may actually allow us to discover an innovative way to educate. Many schools are seeking strategies to provide better

education in a less amount of days. According to Steinback (2008), the Maccray School District in Minnesota have suggested going to school Tuesday through Friday and making each school day sixty-five minutes longer. The superintendent says the district expects to save about \$65,000 a year in transportation costs. In Cluster, South Dakota, students have been going to school Monday through Thursday since 1995. The superintendent says the change has saved an estimated one million dollars over just the past eight years. He sees not only the cost benefits, but claims that students get more instructional time (Steinbach, 2008).

The Negative Effects of Education Budget Cuts

In addition to the lost 36 weeks of education over a twelve year period, schools implementing the accountability testing reveal that more minutes per week are spent focusing on education that is imperative to students passing the accountability tests instead of teaching competencies (Murnane & Papay, 2010). The authors continued by saying that “teachers are concerned that the incentives created by some provisions of the law have elicited unintended responses that reduce the quality of education provided to at least some children” (p. 151). McMurrer (2007), corroborated this with his study on the average number of minutes per week devoted to various subjects (see Table 1). He found that not only was much of the time devoted to English and math skills (503 and 323 minutes respectively), but that much less time was being afforded to art, music, and science (110 and 178 minutes respectively). This disparity among disciplines does not offer a well-rounded education and provides criticism that accountability testing is overemphasized in order for schools to receive the funding they need to operate. In addition, McMurrer, in this same study, found that there was significant evidence of schools changing their curriculum to put more emphasis on content and skills covered on the state tests for the NCLB with 50% and 41% focusing on English and Math respectively realigning at the elementary level alone.

Furthermore, the Center on Educational Policy performed a case study of schools showing improvement from 2006 – 2007 (McMurrer, 2007). Examples of the failure of the NCLB providing improvements to education include; Boston, Massachusetts where only 67 of 167 schools improved, Colorado Springs, Colorado holding 3 of 65 schools improved and Sheboygan, Wisconsin where 0 of the 18 schools improved (See Table 2). Collectively, the percentage of improvement is less than 50% for all schools considered. The loss of a one year equivalency in education should be enough for our educational leaders to reassess the measures required for a school to receive funding. In the years before state accountability testing became a standard, pre No Child Left Behind era; schools were evaluated based on the average student SAT/ACT scores, GPAs and number of graduating students. Since two of the three previous evaluation methods are needed to enter a post-secondary educational system, it would make sense for assessments to return to these methods as they show true accountability of student learning versus a preparing of students to score high on the accountability test. Loss of the NCLB accountability testing will allow teachers to be engaged in true education and extend the amount of educational material to which our students are exposed.

According to Johnson, Koulisch, & Oliff (2009), the state of Maryland in 2009 proposed cuts to such programs as breakfast, pilots as well as math and science while the governor proposed direct aid reduction to schools by \$69 million for the 2009 fiscal year. In addition, the CBPP enlisted the state of Massachusetts as proposing cuts to programs that reach special needs students; Head Start, reductions in special education reimbursements and a reduction in services

for disabled children. Cutting programs such as these only serve to increase the educational gap between students of special needs and other students. Children of low income families often rely on the breakfast programs offered at schools to eat breakfast and fuel their bodies and minds. With this particular program eliminated from the state of Maryland there is an increase cost to parents who may not be able to afford this increase to their expenditures.

The Head Start program is intended to provide services to special needs children and early pre-school to ensure preparedness when these students enter the school system. Cutting such programs, while at the same time reducing funding to the special education segment of the educational system in the state of Massachusetts, will create a larger gap in education between children of special needs and other students. In addition, cutting such programs fails to comply with the NCLB act which was implemented to ensure equal opportunity to quality education amongst all students (Massetti, 2009).

The quality of education is an increasing concern of the negative effects of education budget cuts (Schunk, 2006). With state secondary education institutes decreasing the number of active teachers employed, there is an increase in the number of students per class. This increased student to teacher ratio leads to less individual attention to students. According to the Student/Teacher Achievement Ratio (STAR), a four year longitudinal study conducted by the Tennessee State Department of Education (1996 – 1999), students of lower class sizes (lower student/teacher ratios) were less likely to fail a grade level, were less likely to be suspended from school, made better grades in their high school courses, and were more likely to take more advanced classes when compared to students of a regular or larger class size (HEROS, 2009). It is imperative that studies such as the STAR project be considered when education budget cuts are initiated. Students in areas of high student/teacher ratio will most likely be affected greater than students in areas of lower student/teacher ratios. Increasing budget cuts causes many school districts to close schools in order to save money. Students from those schools are transferred to other schools causing overcrowding of the institute and higher student/teacher ratios.

One of the most notable negative impacts is an increase in the disparity between lower income students and higher income students (Horton & Reed, 2011). A statistical analysis of students graduating high school in 2003 revealed that students of lower income brackets were more likely to require remedial courses upon enrolling in post-secondary education than students of higher income 25.43% and 18.15% respectively (see Table 3). In addition, students of lower income scored markedly lower (400-850) on the ACT in comparison to students of higher income 37.99% and 12.63% respectively (Table 4). The disparity is increased when education budget cuts increase the parent obligation to the educational cost of their dependents. Students of lower income are less likely to receive the necessary resources such as technology, books, supplies, tutoring services and private education in comparison to students of higher income (Bailey, 2008). This disparity often means fewer lower income students scoring high enough on the ACT to enter into postsecondary education and those who do are more likely to require remedial education which should have been learned at the secondary education level. Additionally, the dropout rate is significantly higher for lower income students (Chen & DesJardins, 2008).

According to the CBPP, post-secondary education is also hit with budget cuts that pass the funding need down to the student level. For 2009, in the state of Kentucky, a 3% reduction in funding to universities led to several tuition increases at universities throughout the state: University of Louisville and the University of Kentucky (9%), Murray State (6.1%) and at Western Kentucky University saw a tuition increase of 5%. In addition to these tuition increases

at four year universities, the technical and community colleges also saw a statewide tuition increase of 5.2% (CBPP, 2009). These tuition increases, compounded by the decreases in federal grant funding, greatly reduce the opportunity of a post-secondary education to students of low income as most are unable to absorb the additional cost. For many students this means having to result to applying for and accepting students loans. With our current economic uncertainty, this can be a risk.

CONCLUSION AND RECOMMENDED RESEARCH

Though budget cuts may not be desirable on many fronts, there is some good that comes from it. From a systems perspective, it forces the education system to evaluate its entire process for efficiency and areas for improvement. Many times, processes are overlooked until the need for them to be revitalized prevails. Important areas such as gas consumption, paper usages, and energy efficient strategies are brought to the forefront in a time of crisis. Fortunately, matters such as these are evaluated and improved which sometimes leads to even greater accomplishments. Due to budget cuts, schools are actually assisting in making the world a safer and more environmentally friendly place to live. Even better methods of teaching are being analyzed due to budget cuts which may not only save money, but it could improve education in general.

The negative effects of education budget cuts are being implemented at all levels of education. Unfortunately, the low income students are affected the most. The financial risk involved with increased student loan applications is high at a time of economic uncertainty in the United States. Other at-risk students; students with disabilities and students of special needs, will also feel the effects of the education budget cuts before other students. The increased cuts can create larger student/teacher ratios and diminish the quality of education the students in America receive. It is imperative that our Nation's educational leaders find alternative cuts that will have less of an impact on the opportunity to quality education affecting students. Alternative accountability assessments should be implemented to improve access to education as well as true accountability of educational institutes.

Recommended future research includes conducting a case study on one or more K-12 and post-secondary institutions to validate or refute the findings in this study. The case study could be a single-case study based on observations observed through the findings of the teacher, the administrator, and the students of post-secondary education (or the parents of K-12 students) from one institution. However, this could also be a multiple-case study that would analyze the results from several institutions and triangulate these data to observe any differences from different regions or states.

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APPENDIX

Table 1 – Average number of minutes per week devoted to various subjects or activities

Subject Area	Number of Minutes Per Week		
	Total (All districts)	Districts with no identified schools	Districts with at least one identified school
English language arts	503	483	568
Math	323	320	332
Social Studies	178	181	167
Science	178	181	169
Art and Music	110	113	97
Physical Education	105	106	103
Lunch	142	141	147
Recess	133	134	129

Source: Center on Education Policy, 2007

Table 2 – School districts included in case study interviews

School district name and state	District type	Number of schools in improvement, 2006-2007
Bayonne city school district, New Jersey	Urban, pre K-12	4 of 12
Bloomfield school district, New Mexico	Rural, K-12	3 of 7
Boston public schools, Massachusetts	Urban, K-12	67 of 167
Calhoun county school district, Alabama	Rural & suburban, K-12	4 of 16
Chicago public schools, Illinois	Urban, K-12	343 of 581
Cleveland municipal school district, Ohio	Urban, pre K-12	66 of 102
Colorado Springs school district, Colorado	Urban, K-12	3 of 65
Escondido Union school district, California	Suburban, K-12	7 of 11
Fayetteville public schools, Arkansas	Small city, K-12	1 of 14
Joint school district No 2, Ohio	Suburban, K-12	7 of 43
Oakland unified school district	Urban, K-12	52 of 90
Sheboygan area schools, Wisconsin	Suburban, K-12	0 of 18
Tigard-Tualatin school district, Oregon	Suburban, K-12	0 of 16

Source: Center on Education Policy, 2007

Table 3 – Dependent student’s family income 2003-2004 by remedial course 2004

Dependent student’s family income 2003-2004	No income	\$<32K	\$32K-60K	\$60K-92K	>\$92K	Total
	(%)	(%)	(%)	(%)	(%)	
Total	1.13	23.29	26.18	24.41	24.99	100 %
Remedial course taken						
Yes	1.21	25.43	26.61	28.58	18.16	100%
No	1.11	22.65	26.04	24.45	25.75	100%

Source: U.S. Department of Education, National Center for Education Statistics, Computation by NCES QuickStats on 3/27/2011

Table 4 – Dependent student’s family income 2003-2004 by ACT or SAT

Dependent student’s family income 2003-2004	No income	\$<32K	\$32K-60K	\$60K-92K	>\$92K	Total
	(%)	(%)	(%)	(%)	(%)	
Total	1.13	23.29	26.18	24.41	23.99	100 %
Admissions test scores (ACT or SAT)						
Lowest (400-840)	1.77	37.99	27.45	20.14	12.63	100%
Low middle (850-990)	.93	23.57	26.98	27.54	20.98	100%
High middle (1000-1130)	.89	13.31	27.15	29.55	29.09	100%
Highest (1140-1600)	.75	11.09	21.00	27.99	39.15	100%

Source: U.S. Department of Education, National Center for Education Statistics, Computation by NCES QuickStats on 3/27/2011

