

Looking Ahead
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Center for Education Policy & Development
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Table of Contents

About the Roosevelt Institute	3
Letter from the Policy Director	4
“Abolishing FAFSA to Promote Equity in College Attendance” Reed DesRosiers ‘14 <i>To help low income students understand the costs of college and facilitate their application process, the federal government should reform the financial aid system to become an “opt-out” application run through the IRS via the 1040 tax form.</i>	5-6
“Fostering School-Community Partnerships: A Solution to STEM Apathy” Cayley Heller ‘14 <i>To keep students engaged in STEM and to better prepare them for STEM-based careers, school districts should partner with community organizations to create project-based learning and internship opportunities.</i>	7-8
“Technology in the Classroom” Jordan Marzouk ‘15 <i>With technology having an ever-increasing role in the classroom, it is necessary to establish a set of standards regarding when its uses are both appropriate and beneficial.</i>	9-10
“Bilingual Education: Equalizing the Playing Field For All Americans” Jeffrey Forman ‘15 <i>Promote bilingual education with the goal of increasing the equality of opportunity for English language learners.</i>	11-12
“The Write Choice: A Proposal in Favor of Cursive Handwriting” Matthew Landers ‘15 <i>In order to promote virtues such as history, cognitive development and educational equality, policymakers should strive to revitalize the presence of cursive handwriting in American schools.</i>	13-14
“Making University Affordable: Tax Increase and Incentive Based Cuts” Max Brashear ‘16 <i>Increasing taxes and providing incentives for universities to cut costs will make higher education more affordable.</i>	15-16
Meet the Center for Education Policy & Development	17-18

About the Cornell Roosevelt Institute

The Roosevelt Institute at Cornell University is a student-run policy institute that generates, advocates, and lobbies for progressive policy ideas and initiatives in local, university, state, and national government. Members write for our campus policy journals, complete advocacy and education projects in the local community, host research discussions with professors, write policy and political blogs, and organize campus political debates and policy seminars.

The Roosevelt Institute at Cornell University is divided into six policy centers:

Center for Economic Policy and Development
Center for Foreign Policy and International Studies
Center for Energy and Environmental Policy
Center for Education Policy and Development
Center for Healthcare Policy
Center for Domestic Policy

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Letter from the Director

Dear Readers,

I am excited to present to you the fifth issue of *Looking Ahead: The Cornell Roosevelt Institute Policy Journal* by the Center for Education Policy and Development. This journal contains the work of six policy analysts; each of whom spent many hours doing in-depth research and careful deliberation to find solutions to the problems plaguing our education system today.

As students at Cornell University, we've experienced firsthand much of the benefits that our education system has to offer. With this, however, we become more aware of the gaping and ever-increasing inequality that still exists. From school vouchers to teacher unions to charter schools, one could spend countless hours debating proposed solutions. We all come from incredibly diverse backgrounds to attend one of the best academic institutions in the world, and with our varying perspectives we are in a unique position to discuss and search for solutions that ensure the greatest possible equality in education.

Each proposal in this journal engages with some of the toughest issues surrounding education reform. Together, they show all that we have the potential to accomplish if we fight hard enough. We're lucky to be where we are today because of education; it's up to us to provide this opportunity to everyone.

Sincerely,

Nicholas Raskin

Economics and Government (A&S '16)

Director, Center for Education Policy and Development



Abolishing FAFSA to Promote Equity in College Attendance

By Reed DesRosiers, Major: Policy Analysis and Management '14, Email: rpd59@cornell.edu

To help low income students understand the costs of college and facilitate their application process, the federal government should reform the financial aid system to become an “opt-out” application run through the IRS via the 1040 tax form.

History:

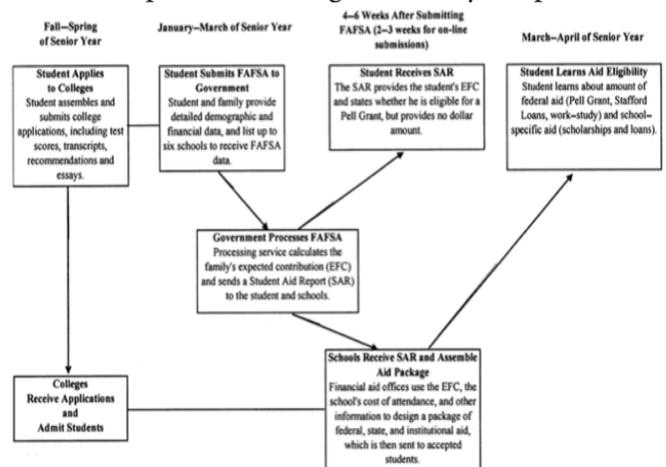
In the United States, students in the highest quartile of family income are more than twice as likely to attend some form of post-secondary education as students in the lowest quartile². Part of this problem is certainly that the sticker price of college is enormous, and continues to increase, intimidating students out of applying to college. Although most high school students overestimate the cost of attendance, this confusion is of greater consequence for low-income students, who (unlike their upper-income counterparts) are pessimistic about their ability to pay for college¹. However, an interesting part of this increase in cost is that it really only affects those of higher incomes, because as the sticker price of college has risen rapidly, so has the amount of need-based financial aid available. In essence, the price of college has grown increasingly individualized, and is actually quite affordable for students of lower-income levels³. The second primary cause of this discrepancy is that the “Free Application for Federal Student Aid,” more commonly known as FAFSA, is hardly “free.” Despite its lack of monetary cost, the process’ complexity (see Figure 1) imposes other regressive costs on low-income populations that prohibit them from discovering the true price of college. The FAFSA form is a beast of a piece of paperwork, composed of 137 questions on 5 pages. Although the Department of Education (DoE) assures families that it will take “one hour” to complete the form, a similar form, the IRS 1040 with 118 questions on 2 pages, takes about 20 hours³. The systems in place to facilitate equity in post-secondary education are failing to allocate aid in their purported manner because of the high expected costs of college due to a lack of information on cost, and the extraordinarily complex FAFSA process that induces many families to abandon the prospects of college altogether.

Key Facts:

- Although the costs of college are increasing rapidly, so is the amount of aid available for low-income families.
- The FAFSA form is composed of 137 questions on 5 pages, and can take about 20 hours to complete.
- The same aid decisions and allocations can be reached with 20% of the information collected.

Analysis:

If the Department of Education’s intention is to facilitate the entry of low-income students into post-secondary education, it is failing. The FAFSA process is too complex and low-income students do not have accurate perceptions of the costs of college. These factors are discouraging low-income students from applying to and attending college. Fortunately, there are relatively simple fixes. According to a study by Dynarski et al., almost all of the variation in student aid computed by the FAFSA form can be reproduced using a radically simplified aid process. In a simulation, the authors showed that by trimming 80% of questions and turning the five-page form into a one-page form, they are able to replicate almost the exact same aid allocations as the original. In fact, this reduced form looked almost exactly like the IRS 1040EZ form that most low-income families must submit each year for tax purposes. In another study, Bettinger et al. gave certain families help filling out their FAFSA forms by automatically inputting the data from their IRS 1040EZ forms into the FAFSA. They also provided immediate information on the aid families could expect to receive, and the associated costs of



four nearby colleges. The effect of this FAFSA simplification and information treatment was significant, causing families to be 40% more likely to file a FAFSA, 24% more likely to attend college, and 34% more likely to attend college and receive a Pell Grant. If the FAFSA form is more complex than an IRS form, but collects the same information, the Department of Education should eliminate the redundancy by abolishing the FAFSA process altogether and focusing on providing more information on cost. The IRS 1040 can replace the FAFSA process altogether without sacrificing quality.

Next Steps:

The Department of Education should abandon the FAFSA process, and the federal government should run the post-secondary financial aid system through the IRS via the 1040 tax forms. These forms already collect more than enough information to accurately determine aid, and will make the system more equitable for low-income families. Since all families must submit their taxes each year, they will not have to fill out an additional form to be considered for financial aid. This will reduce bureaucratic redundancy, and decrease complexity for families by making the system “opt-out” rather than “opt-in.” The IRS could provide financial aid estimates to students before their senior year, so that they have an accurate idea of the costs of college attendance. The Department of Education should commit its newly available resources to creating semi-personalized information for students. They could garner information on expected aid to students from the IRS and partner with state education systems to give accurate information on cost and local colleges. With these changes, many more low-income students would certainly be induced to attend college and receive more education, which would have long-lasting positive effects for themselves, their communities, and our country.

Talking Points:

- Financial aid application complexity and a lack of information are prohibiting low-income students from applying to and attending college.
- Financial aid will be more efficiently and equitably allocated if the system is run through the IRS rather than the DoE.

Endnotes:

¹ Avery, Christopher, and Thomas J. Kane. “Student Perceptions of College Opportunities: The Boston COACH Program.” In *College Choices: The Economics of Where to Go, When to Go, and How To Pay for It*, edited by Caroline Hoxby, 355–94. Chicago: University of Chicago Press, 2004.

² Belley, Phillipe, Marc Frenette, and Lance Lochner. “Post-Secondary Attendance by Parental Income: Comparing the U.S. and Canada.” (2010): n. page. Web. 14 Nov. 2013. <http://econ.as.nyu.edu/docs/IO/16370/Lochner_20101025.pdf>.

³ Bettinger, Eric, Bridget Terry Long, Philip Oreopoulos and Lisa Sanbonmatsu (2012). “The Role of Application Assistance and Information in College Decisions: Results from the H&R Block Fafsa Experiment.” *Quarterly Journal of Economics* 127(3): 1205-1242.

⁴ Photo Courtesy of the National Tax Journal

Fostering School-Community Partnerships: A Solution to STEM Apathy

By Cayley Heller, Major: Policy Analysis and Management '14, Email: cdh88@cornell.edu

To keep students engaged in STEM and to better prepare them for STEM-based careers, school districts should partner with community organizations to create project-based learning and internship opportunities.

History:

It has been over 30 years since the publication of *A Nation at Risk* sparked a push to move past 'mediocrity' in our education system, particularly in STEM. Even after a series of reforms, STEM education still has much to be improved.

According to the National Science Foundation, domestic students in the U.S. are decreasingly choosing STEM majors, meanwhile the demand for them in the labor market is ever-increasing¹. Even with choice aside, a mere 30% of high school graduates are even ready to tackle science at the college level².

Those examining disengagement with STEM fields, particularly among women cite two main elements behind the decision to pursue a STEM major: personal capabilities and preparedness as well as an interest in the discipline. Jan Cuny, the National Science Foundation's Computing Education for the 21st Century program director, asserts this lack of attraction among girls comes from popular misconceptions about STEM fields. That they are 'too hard,' 'geeky,' 'require a single-minded 24/7 focus' or that the fields 'provide little benefit to society'³.

There have been numerous suggestions aimed at improving STEM education, including producing more and better STEM teachers and increasing the rigor of the curriculum⁴. However many of the suggestions address only one facet of the problem. City governments should invest in fostering school-community partnerships for project-based learning and internship opportunities, which would do the best job at addressing all ends of the problem. Providing real life problems and resources would create a more rigorous environment, but increasing the level of interactivity, practicality, and applicability will also increase engagement and retain students in the field, particularly those traditionally underrepresented such as females and minorities.

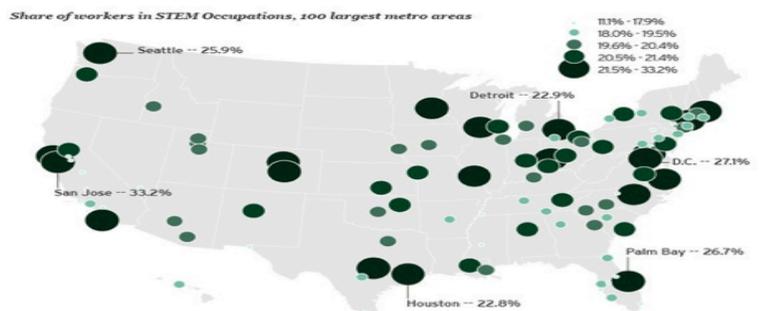
Analysis:

Surveys suggest that opportunities for practical learning experiences are correlated with higher school retention rates and higher paying wages for students when they eventually graduate⁵. A Brandeis University study suggests that students who participate in hands-on STEM learning experiences are nearly twice as likely to major in a science or engineering field⁴.

One of the core arguments against the movement towards project-based learning is that it makes it more difficult to comply with state standards and to evaluate student progress and learning. Existing programs, such as MC2 (Metropolitan Cleveland Consortium) STEM High school, found that not only were they able to work to be sure that new programming complied with state standards, but businesses

Key Facts:

- 5% of American graduates majored in engineering, as compared to 12% of European graduates and 20% of Asian students⁴.
- Women in the US earn, on average, 77 cents for every dollar a man earns. Getting more women in STEM careers has been one way shown to help reduce inequality of pay⁸.
- There will be a predicted 1.2 million US job openings in STEM fields by 2018, with a lack of qualified candidates⁹.



Metro areas with higher STEM knowledge have stronger economies

Workers not only do better economically when they work in STEM fields, but the overall economy appears to benefit as well.

	Metropolitan areas by STEM concentration quartile:			
	Top	Second	Third	Bottom
Patents per million residents, 2011	1.27	0.72	0.48	0.37
Unemployment rate, 2011	8.3%	9.0	9.9	10.3
Median household income, 2011	\$58,482	54,005	46,575	44,184
Exports as share of GDP, 2011	10.8%	8.9	8.5	7.4
Employment growth rate, 2008-2012	-2.8%	-3.7	-5.4	-5.2
Tech. sector employment share, 2011	6.2%	4.4	3.0	2.3

often had suggestions for a curriculum that would both be relevant to careers and to what the standards required. It is also important to note that current standards and means of evaluation are not necessary all-encompassing, and the movement towards more project-based learning might open up to alternative forms of evaluation.

Traditional thinkers might be opposed on a theoretical standpoint as well, but proponents of the constructivist movement such as John Dewey cite the importance of engaging students as active participants in learning for creating lifelong learners.

Next Steps:

In order to cultivate better, more engaging STEM education, there are a number of measures that must be taken. It is vital that relationships are

cultivated between schools and local higher education institutions, museums, research centers, nonprofits and businesses. The partnership between the Westbury Union Free School District and AAR Aircraft Component Services is a prime example of this, with the relationship benefiting disadvantaged students through exposure to STEM fields and benefiting AAR with possible future employees⁴. City governments can encourage organizations to participate for goodwill, and can also subsidize internships and programs that are created as part of co-operative education partnerships with local districts. The partnerships should begin with high school programming, where the benefits are most directly visible to the partners. Once the partnerships are grounded, programs can be expanded to include elementary and middle schools.

MC2 serves as an excellent model. MC2 provides access to internships and project based learning opportunities to allow students the chance to see what STEM careers are like and to gain experience that might help them choose a future path. The hands-on experience gets students out of the textbook rut, engaging them more in their studies. It can help students understand the relevance of what they are learning and allow them to see the link between their education and future, all the while complying with Ohio Academic Content Standards⁷. Using existing models for programs and partnerships, city governments should incentivize connections between businesses and public education institutions. A model should be built to share curriculums and tested programs, to assist teachers and faculty and to facilitate the transition in the classroom.

Endnotes:

¹ Weaver, Gabriela C., Kamyar Haghighi, Douglas D. Cook, Christian J. Foster, Sidney M. Moon, Pamela J. Phegley, and Roger L. Tormoehlen. "Attracting Students to STEM Careers." Purdue University. http://www.purdue.edu/strategic_plan/whitepapers/STEM.pdf.

² Varner, Lynne K. "Better STEM Education, Training Needed for Mismatched Workers." The New York Times, November 14, 2013. Accessed November 18, 2013. http://seattletimes.com/html/opinion/2022261584_lynnevarnercolumnboeingstemxml.html.

³ Coger, Robin C. "Why STEM Fields Still Don't Draw More Women." The Chronicle of Higher Education, October 29, 2012. Accessed November 18, 2013. <http://chronicle.com/article/Why-STEM-Fields-Still-Dont/135302/>.

⁴ "New Partnership with Local Westbury Schools and Cradle of Aviation Museum Will Help Prepare Long Island Youth for Jobs of Tomorrow." Kristin Gillibrand: United States Senator for New York. Last modified February 24, 2012. Accessed November 18, 2013. <http://www.gillibrand.senate.gov/newsroom/press/release/with-eight-out-of-nine-of-the-fastest-growing-industries-requiring-math-and-science-proficiency-senator-gillibrand-joins-aar-and-long-island-youth-to-announce-new-hands-on-stem-internship-for-local-students>.

⁵ Vega, Vanessa. "Research-Based Practices for Engaging Students in STEM Learning." Edutopia. Last modified October 31, 2012. Accessed November 18, 2013. <http://www.edutopia.org/stw-college-career-stem-research>.

⁶ Noll, James. Taking Sides: Clashing Views on Educational Issues. 17th ed. N.p.: McGraw-Hill/Dushkin, 2012.

⁷ Nobori, Mariko. "Internships Provide On-the-Job Learning." Edutopia. Last modified October 31, 2012. Accessed November 18, 2013. <http://www.edutopia.org/stw-college-career-stem-internship>.

⁸ Albert, Erin. "Why It Is Imperative to Get Girls in Indiana Engaged in STEM." Inside Indiana Business. Accessed November 18, 2013. <https://www.insideindianabusiness.com/contributors.asp?ID=2732>.

⁹ DeBruyn, Jason. "RTP Chosen as Finalist for STEM Education Grant." Triangle Business Journal, November 15, 2013. Accessed November 18, 2013. <http://www.bizjournals.com/triangle/news/2013/11/15/rtp-chosen-as-finalist-for-stem.html>.

¹⁰ Photo courtesy of www.fastcoexist.com

Talking Points:

- High school students are graduating unprepared and uninterested in pursuing STEM fields.
- The need for STEM is growing, with women and minorities continuously underrepresented.
- Community partnerships for internships and project-based learning will engage more students, particularly underrepresented, in the field.

Technology in the Classroom

By Jordan Marzouk, Major: Applied Economics and Management '15, Email: jdm325@cornell.edu

With technology having an ever-increasing role in the classroom, it is necessary to establish a set of standards regarding when its uses are both appropriate and beneficial.

History:

Classroom teaching has historically consisted of monotype lectures to deliver information and present material. Though technology touches almost every facet of daily life and continues to do so at an increasing rate, most schools lag far behind when it comes to integrating technology into the classroom and making the switch from these antiquated lectures to dynamic and engaging sessions. Critics argue that increasing technology “may actually be making [students] stupider” and takes the emotion and heart out of the classroom, but 78 percent of educators surveyed in a study by CompTIA believed the proliferation of technology has had a net positive impact on overall education results, processes, and performances^{3,4}. The American Recovery and Reinvestment Act of 2009 (ARRA) provided approximately \$100 billion for education, creating a historic opportunity to save hundreds of thousands of jobs, support states and school districts, and advance reform and improvements for students. The act had no specific implications for technology until the fall of 2009 when \$650 million of the ARRA was mandated to be used specifically for educational technology state grants². Thus, though technology in education is partially funded on the national level, freedom to pursue or not pursue the uses of new technology lies mostly on the state and district level. This freedom has resulted in two problems: a general trend in schools to spend funds on things other than technology or ineffectively spend on technological changes that don't yield significant results.

Key Facts:

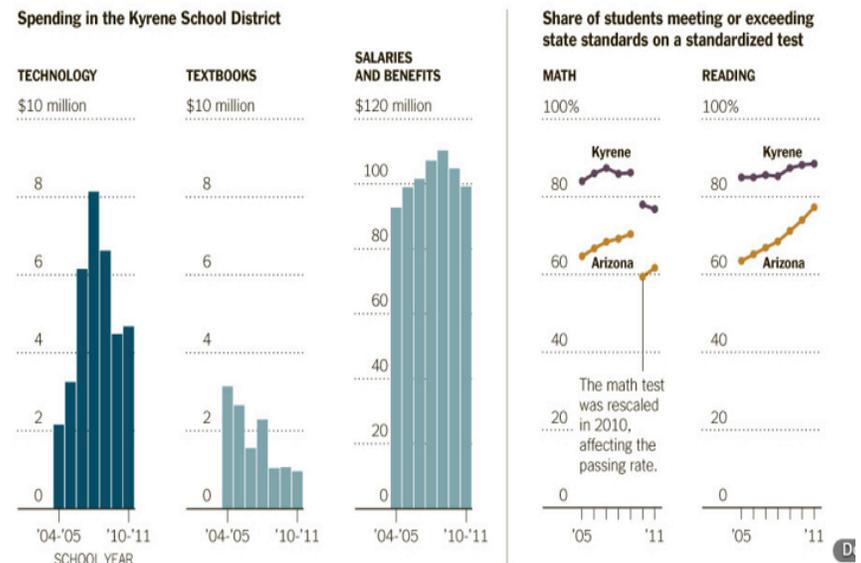
- 65% of educators believe students are more productive today than they were three years ago due to the use of technology⁴.
- More than 75% of teachers reported that having the laptops in the classroom as a result of the Maine Learning Technology Initiative helped them better meet Maine's statewide learning standards¹.
- Schools and districts that use assistive technologies to help students with disabilities in a variety of content areas including math, reading, writing, listening, and memorization/organization are more effective than those that don't².

Analysis:

Though the ARRA is a good start at catching up schools that are well below technological standards, the piece of legislation lacks focus. This same problem occurs when state or district money is blindly thrown at new technologies, when in fact, these expensive changes have little to no impact on the students themselves. For example, even though Chicago Public Schools spend more than \$40 million per year on technology, students in the Bronzeville school exemplify a dangerous disparity in the United States called the “digital divide”; these students are not building their technology skills and are not able to access some of the supplemental material, meaning those funds are largely being wasted⁵. Therefore, a set of guidelines must be established and applied in order to de-

Schools Seeking Results From Technology Spending

In 2005, voters in the Kyrene School District in Arizona approved a ballot measure to pay for computers and other technology in schools. District scores on standardized tests have not budged much since then, and officials wish they had evidence that the investment was paying off. Meanwhile, budget cuts have hurt other kinds of spending.



termine if a technological change should actually be made. Each level of government, before implementing a certain technological change, should use a guideline that answers the following three questions as evaluative criteria: (1) Is the technology shown effective in improving the education of students, whether in enhancing understanding, improving test scores, or increasing efficiency of certain processes? If there is no previous study done to show improvement, a small trial should be conducted, using a small-scale implementation of the technology in the school (or a similar school), to judge its effectiveness. (2) Are there resources available to train instructors on the uses of the technology change and are teachers willing to learn? (3) Does the cost of the technology prevent other potential implementation, i.e. is the cost worth the value or effectiveness determined in (1)? Responses to all three questions should be deemed satisfactory in order for a change to be implemented. The cost of implementing this procedure should come from the federal government.

Talking Points:

- Introducing technology in the classroom is seen by administrators, teachers, and parents as an effective way to create a more dynamic approach to learning.
- Projects that increase the level of technology in a classroom are not automatically effective; before implementation, there should be evidence of a projects' effectiveness, enough time and ability to train instructors, and a positive net benefit to students when taking cost into account.
- Increased funding to technology programs coupled with more regulation of the programs themselves will lead to higher quality education for all students.

Next Steps:

ARRAs allocation to technology should be increased and other legislation should be passed allocating more money to schools for the specific purpose of technology use, and especially for districts that do not currently receive enough money from the state or district level. Those that currently receive less funding should be compensated with even more of an increase in funding to account for the higher cost associated with preparing educators in these schools to use such technologies. As a follow up to this increased funding, each proposed change should be carefully considered using the above guideline. If a change meets the above criteria and is deemed acceptable by either the state legislature or Board of Education, the implementation should be carried out as soon as possible. Essentially, it is important that we both increase funding for technology in classrooms and also spend that money efficiently and equitably.

Endnotes:

¹ Ed Tech and Student Achievement." ETAN: Ed Tech Action Network. Accessed November 13, 2013. <http://www.edtechactionnetwork.org/ed-tech-and-student-achievement>.

² Gray, Tracy. "Technology and Its Role in Increasing High School Success." National High School Center at the American Institutes for Research. Accessed November 13, 2013. http://www.betterhighschools.org/expert/ask_tech.asp.

³ Gulley, Kathleen Patrice. Pros and Cons of Computer Technology in the Classroom. Sacramento: California State University, n.d. <http://nau.edu/uploadedFiles/Academic/COE/About/Projects/Pros%20and%20Cons%20of%20Computer%20Technology%20in%20the%20Classroom.pdf>.

⁴ "Making the Grade: Technology Helps Boosts Student Performance, Staff Productivity in Nation's Schools, New CompTIA Study Finds." CompTIA: The IT Industry Association, June 28, 2011. http://www.comptia.org/news/pressreleases/11-06-28/Making_the_Grade_Technology_Helps_Boosts_Student_Performance_Staff_Productivity_in_Nation%20s_Schools_New_CompTIA_Study_Finds.aspx.

⁵ Pandolfo, Nick. "Digital Divide: Chicago, Suburban Schools Illustrate Differences in Technology." Chicago Tribune. Accessed November 13, 2013. http://articles.chicagotribune.com/2012-01-25/news/ct-x-digital-divide-0125-20120125_1_computers-consortium-for-school-networking-poor-schools.

⁶ Photo courtesy of the New York Times.

Bilingual Education: Equalizing the Playing Field For All Americans

By Jeffrey Forman, Major: Government '15, Email: jtf76@cornell.edu

Promote bilingual education with the goal of increasing the equality of opportunity for English language learners.

History:

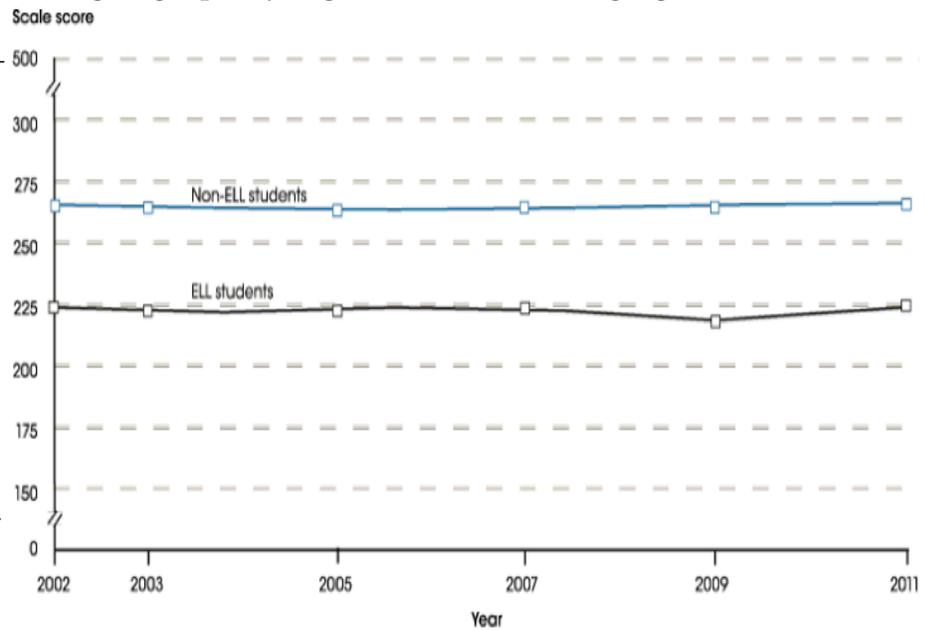
School-age children who speak a language other than English at home are on of the fastest-growing populations in the country. Between 1980 and 2009, their numbers doubled, and they currently make up 21 percent of school-age children. According to recent figures from the US Department of Education, 4.7 million students are classified as “English language learners” – those who have not yet achieved proficiency in English – in the 2009-2010 school year – or about 10 percent of children enrolled¹. Schools that are charged with educating these students tend to be low-income and urban. English language learners have graduation rates of less than 60 percent¹. While the majority of English language learners are Hispanic, these students represent a multitude of language and ethnicities, and the vast majority of them were born in the United States. The federal government requires school districts to serve English learners, but it does not have legislation in place that stipulates exactly how schools should identify, assess, place, or instruct them. Achievement gaps have been large and persistent between English learners and English-proficient students. This ultimately suggests that the United States needs a more effective system to educate these students in order to foster equality of educational opportunity. With the nation becoming increasingly diversified, the US Department of Education needs to take action in order to accommodate students who are linguistically disadvantaged through no fault of their own.

Key Facts:

- 10 percent of US public school students struggle with the English language, while just 1 percent of its teachers are qualified to instruct them.
- English language learners have graduation rates of less than 60 percent¹.
- Two-way immersion programs have proven to be more successful than any other type of program for English language learners.

Analysis:

Knowledge, literacy, and enhanced social awareness are three important benefits of quality education in a child’s primary language. Research suggests that solid background in their first language leads to a greater mastery of written and spoken English. Reading is a critical skill that translates across all languages. Vocabulary is an important first step toward success in reading. High quality English-as-a-Second-Language (ESL) classes are an integral part of a bilingual education program. Although research is inconclusive regarding the most effective methods of teaching English learners, the efforts to push for bilingual education have been recently revitalized. Virginia Collier and Wayne Thomas of George Mason University conducted a study of more than 6 million students and determined that full-immersion bilingual programs in which both native and nonnative speakers of English are given instruction in both English and Spanish produce the best results. These researchers found that native-Spanish speakers in a Houston school district were at or above grade level in both English and



Spanish in grades one through five¹. Some programs stipulate that half of the subjects are taught in English and the other half in Spanish, or they begin with more time in the dominant language until equal fluency in both is achieved. The success of these programs is also contingent on the quality of instruction, materials, and support from the broader community. Teachers need to tailor their curriculums to the needs of the students in their classroom. The development of native-like proficiency in English takes many years, so it is imperative that teachers understand that they can achieve these standards without complete fluency. Controversy in Washington surrounding immigration and multiculturalism is a roadblock toward securing a good education for English learners. While the focus of bilingual education will ultimately be placed on native Spanish speakers, communities with substantial populations of speakers of other languages should implement bilingual education programs to accommodate these larger minorities. This program is certainly not a panacea, but it still has the potential to close the achievement gap and increase the equality of opportunity for a significant portion of English language learners.

Talking Points:

- Schools that provide services for English learners and other linguistically disadvantaged children, particularly in low-income areas, provide students with the best and perhaps the only chance to achieve economic security².
- Research suggests that quality of instruction is what matters most in educating English learners².
- The best bilingual education programs include ESL instruction, sheltered subject matter teaching, and instruction in the first language.

Next Steps:

Implementation of a “dual immersion” bilingual education program requires the acquisition of competent, bilingual teachers, financial resources to fund materials, and the support and involvement of parents and the broader community. Instead of ignoring the students’ first language, this program needs to encourage the mastery of Spanish in terms of both literacy and oral proficiency. Bilingualism will be promoted to both English learners and native English speakers. Class sizes should be between 12 and 18 students in order to accommodate the social needs of younger children. Beginning in a public elementary school in Miami, Florida would be ideal. Teachers must spend copious amounts of time on word meaning, decoding, grammatical structures, background knowledge, and comprehension skills². Schools must diligently monitor who is succeeding and who is not. Staff development should be an intensive part of this program, and standards of behavior in the classroom should be enforced. The Department of Education should set aside funds for bilingual education and apportion them across the country according to the needs of each state.

Endnotes:

¹ Armario, Christine. “U.S. Bilingual Education Challenge: Students Learning English A Second Language At Risk.” The Huffington Post. Apr 2014. http://www.huffingtonpost.com/2013/04/14/us-bilingual-education-_n_3079950.html.

² Calderón, Margarita. Slavin, Robert. Sánchez, Marta. “Effective Instruction for English Learners.” The Future of Children. Vol. 21. No. 1. Spring 2011. http://futureofchildren.org/futureofchildren/publications/docs/21_01_05.pdf.

³ “Limited-English Students Test Public Schools.” Facethefacts.org. August 2013. <http://www.facethefactsusa.org/facts/limited-english-students-test-public-schools>.

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⁷ Photo courtesy of the Institute of Education Sciences.

The Write Choice: A Proposal in Favor of Cursive Handwriting

By Matthew Landers, Major: Policy Analysis and Management '15, Email: mjl334@cornell.edu

In order to promote virtues such as history, cognitive development and educational equality, policymakers should strive to revitalize the presence of cursive handwriting in American schools.

History:

Over the years, there has been a substantial decline in the use and popularity of cursive script in the U.S. With the emergence of computer keyboards and mobile texting as alternatives for communication, many feel that learning cursive has come to be an inconvenience instead of an advantageous tool. One can observe this in 21st century adolescents: 15% of students who took the ACT exam in 2012 wrote the essay portion in cursive handwriting¹. Even among older generations, only a very small fraction of adults write in cursive despite learning it for decades².

In light of these trends, there have been increased measures to write off teaching cursive within elementary school curriculums. Opponents claim that in an age of limited class time and high-stakes standardized tests, learning how to write cursive is impractical^{1,5}. Not only is it a skill that has no use in the modern job market, but it is also slower than typing and is often illegible⁵. These educational reformers seek to modernize the education system to adapt to a changing society's demands.

Lawmakers have already undertaken significant steps to eradicate cursive in instructional settings. In 2011, the Common Core State Standards, the institution that regulates educational benchmarks for U.S. public schools, omitted cursive as a mandatory requirement². Since this declaration, 45 states have initiated steps to reducing the amount of time cursive is taught in classrooms³. What is more, states of Hawaii and Indiana have dropped cursive entirely in favor for keyboard proficiency lessons in public schools².

Despite this progress, there still remains a significant proportion of the U.S. population that disapproves of the cursive removal. They argue that cursive creates opportunities to study historic texts, is faster than writing in print, decreases likelihood of forgery, and is ascetically pleasing^{1,2,3,4}. This perspective, however, is scarcely represented in the government, lacking political influence in debates over legislative initiatives.

Analysis:

Going against recent government initiatives, this proposal contends that the preservation of cursive handwriting in education remains a worthwhile cause. Firstly, cursive has been proven to develop motor skills and enhance cognitive development in children¹. While typing with repetitive finger movements only minimally stimulates brain activity, writing in cursive involves executing sequential finger strokes to form letters^{3,4}. As a result, learners develop key sensory skills and brain regions involved with thinking, language and memory⁴. This may be related to the positive correlation between SAT essays written in cursive and higher SAT scores on average².

There are additional benefits to cursive handwriting that may not be easily perceived by lawmakers. For instance, a student who can read and write cursive possesses the ability to analyze historical texts written in cursive that are crucial to modern understandings of the past³. Cursive also discourages forgery and allows one to write faster than if one relied solely on print letters². But most importantly, a study by George Washington University finds that as of 2013, 20% of American households still do not have broadband internet access. Therefore, doing away with cursive and instituting keyboard typing could potentially exacerbate already wide gaps in educational inequality.

Key Facts:

- Only 15% of students who took the ACT exam in 2012 wrote the essay portion in cursive handwriting in 2012.
- 45 states have initiated steps to reducing the amount of time cursive is taught in classrooms.

Next Steps:

Those opposed to cursive handwriting falsely assume that advances in technology render the focus on penmanship outdated⁶. It is possible, however, to apply modern technology to help students write in cursive⁶. With the creation of multifaceted devices like smartphones and iPads that are available to mainstream consumers, one can create applications that make writing cursive more interactive and engaging. These resources should be factored into school budgets so that students of all socioeconomic backgrounds can have access to them.

But in order for these initiatives to occur, policymakers and their constituents must be made aware of the virtues of cursive script. Social scientists can help address this issue by conducting experiments that provide evidence to support the cognitive and developmental advantages of cursive. More importantly, social attitudes that view education solely as a means to achieve on tests and perform in the job market must be altered. School should be perceived as an environment where students learn knowledge and develop skills that foster personal and social development. Despite its limited utility on a standardized test or a job interview, cursive remains a useful skill that helps develop brain functions and motor skills. Benefits such as these should be prioritized by teachers and lawmakers; outlooks on the purpose of schooling should be better prioritized to create more well-rounded students.

Talking Points:

- Cursive has been proven to develop motor skills and enhance cognitive development in children.
- Cursive creates opportunities to study history, is faster than printing, decreases attempts of forgery, and is aesthetically pleasing.
- Replacing cursive with keyboard typing in curriculums could increase gaps in educational inequality.

Endnotes:

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Making University Affordable: Tax Increase and Incentive Based Cuts

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Increasing taxes and providing incentives for universities to cut costs will make higher education more affordable.

History:

In recent decades, the cost of higher education has increased at a rate well beyond that of inflation. Since 1985, college education inflation has increased by about 500%, while the overall consumer price index has only increased by about 115%⁵. While the amount of federal aid available to students who are able to demonstrate financial need has also risen, it has not been able to match the dramatic rise in tuition. Further, studies, like one conducted at the University of Oregon by Larry Singell Jr. and Joe Stone, suggest that a correlation exists between increased amounts of “federally subsidized aid” and the rising costs of attending private and out-of-state public schools³.

In fact, Singell Jr. and Stone demonstrate that “each increase in Pell aid is matched nearly one for one by tuition increases.” Couple this with the fact that, as Benjamin Landy writes, “states funding for [...] public colleges and universities has collapsed over the last two decades,” and the problem begins to look very grim indeed¹.

The net result of increased tuition fees is that members of the middle class, who may not be eligible for need based financial aid, are being forced into taking loans and incurring debt further down the road. This suggests that while previous approaches have, quite rightly, targeted lower income level families, a new approach is necessary to curb the rising costs of tuition in an effort to avoid pricing out the middle class.

Analysis:

If Singell Jr. and Stone are correct in their assertion that increased federal aid to students seems to justify tuition hikes in the eyes of the universities, further increasing the amount of federal aid available cannot be the only solution. It is part of the solution, certainly, yet in order to truly rein in the rising costs of higher education, especially public schools, efforts must be made to compromise with the institutions themselves. This compromise ought to manifest itself in the form of increased funding tied to incentives designed to encourage universities to cut non-academic costs, while investing further in academic ones.

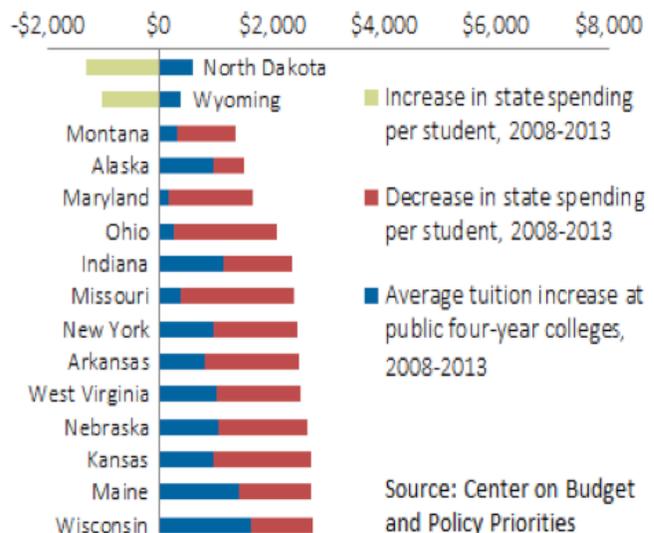
With American universities taking on a greater global appeal in the last several decades and attracting many of the brightest students from around the world, they have begun to compete with each other with higher end amenities. Dining options, exercise facilities, and dorm rooms were all far more basic several decades ago than they are today, and the burden of these increased costs finds its way onto the shoulders of the students and their families.

If Americans are to realize the goal of making higher-level education available to all, universities must act prudently – cut costs and reallocate expenses. With income tax rates a fraction of what they were during the Eisenhower era, increasing tax rates is an

Key Facts:

- The marginal tax rate of someone earning \$100,000 was 89% in 1950. Today it is 28%.
- The cost of recruiting and enrolling each new student is approximately \$6,000. Why?
- Every state, bar Wyoming and North Dakota, spend less on university funding than they did five years ago.

Combination of tuition hikes and state funding cuts leave public college students paying the difference



appropriate place to begin⁴. It becomes more complicated, however, when deciding exactly how to allocate the additional funds.

Next Steps:

Universities that will receive additional funding from of tax hikes will do so under the condition that the money is used in certain ways. Legislating this is in no way an easy matter, as money is fungible and can be hidden and moved around. Yet it can be done. For instance, universities that agree to cut costs in certain noncore activities, such as unnecessary auxiliary enterprises and institutional support, will be rewarded with increased government funding on the condition that it must be used to facilitate academic improvement. Other conditions must also be set in place, such as requiring the institutions to maintain (or increase) their existing contribution to academic endeavors.

Negative incentives should also be set in place. If institutions fail to cut costs in activities that seem surplus to requirement in terms of improving education, yet nonetheless drive up tuition costs, government funding will be reduced. If savings from the cutting of nonessential activities are not directed toward lowering tuition or investing in improving the quality of education, funding will also be decreased.

Ultimately, federal aid must continue to be made available to those who need it most. Yet steps must also be taken to curb that the increasing tuition rates, especially at public institutions, to ensure that university remains (or becomes) affordable to the middle class. The government certainly has less sway over private institutions, but this is not the immediate problem. By ensuring that public school tuition decreases, the number of students able to attend will rise. And after all, in this case, making quality higher education available to all should be priority number one.

Endnotes:

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⁶ Photo ocourtesy of The Century Foundation.

Talking Points:

- Increase taxes to make more funding for universities available.
- Make this funding available under the condition that nonessential costs are cut, and money is reallocated to academic ventures.
- Provide incentives, both positive and negative, to ensure that universities try to drive down the costs of tuition while increasing the funding of academic endeavors.

Meet the Education Policy Center



Reed Des Rosiers

Reed Des Rosiers is a senior Policy Analysis and Management Major at Cornell University. When he's not researching and writing about education and education policy, he enjoys the outdoors, sports, and travelling. He will be a public school teacher with Teach For America in Baltimore after he graduates.



Cayley Heller

Cayley Heller is a senior in the College of Human Ecology, majoring in Policy Analysis and Management and minoring in Business, Education and Inequality Studies. Outside of the Roosevelt Institute, Cayley works as a Public Achievement Coach, the marketing chair of Cornell FACES and a store services associate at The Cornell Store.



Jordan Marzouk

Jordan Marzouk is a junior in the College of Agriculture and Life Sciences double majoring in Applied Economics and Management and Food Science. He enjoys travelling to new places and playing squash.



Jeffrey Forman

Jeffrey Forman is a Government major in the College of Arts and Sciences and is from Philadelphia, PA. On campus he is a policy analyst for the Roosevelt Institute Center for Education Policy and is a brother of Alpha Phi Omega.

Meet the Education Policy Center

Matthew Landers

Matthew Landers is a junior studying Policy Analysis and Management in the College of Human Ecology. Originally from Boston, Massachusetts, he is interested in studying education and international policy.



Max Brashear

Max Brashear was born in the United States, but has spent the bulk of his life in Hong Kong. Currently an undergraduate government major at Cornell in the College of Arts and Sciences, Max is especially interested in American domestic politics, as well as the politics of Southeast Asia.



Nicholas Raskin, Director

Nicholas Raskin is a sophomore in the College of Arts and Sciences double majoring in Economics and Government. Outside of Roosevelt, he is a member of the Cornell Forensics Society and a research assistant in Dr. Valerie Reyna's Laboratory for Rational Decision Making. After college, he hopes to attend law school.





“The school is the last expenditure upon which America should be willing to economize.”

-Franklin D. Roosevelt