

The Ethics of Spending to Increase Standardized Testing Outcomes

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Abstract: The United States spends money to keep up with other countries with different economic systems. To excel at standardized tests signifies an excellent education system. But is emulating countries that are ace test takers a good way to use tax payer's and government dollars? Spending time and money on high stakes testing detracts attention from spending efforts in creating new and innovative ways of education.

When test scores for an international standardized test were announced in 2012, the United States was baffled at its position on the results list. We scored lower than other developing countries like Finland and Vietnam, the Netherlands and Singapore, ranking 29th out of 65 nations in the Programme for International Student Assessment (PISA) that measures reading literacy and science skills¹. The score dropped, as the United States scored 23rd just three years earlier. The score overall has been stagnant for the last ten years².

But the PISA is not the only test students and countries rely on. Standardized tests affect the decisions of policy makers, parents and students in terms of where to put personal and government money. The tests found in elementary

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¹ Fensterwald, John. "U.S. scores stagnant, other nations pass us by in latest international test." *EdSource*. EdSource, 2015. Web. 20 July 2015.

² Fensterwald, John. "U.S. scores stagnant, other nations pass us by in latest international test." *EdSource*. EdSource, 2015. Web. 20 July 2015.

and secondary schools in the United States consist of Common Core State exams for elementary students, and AP and SAT scores for college. These tests determine outcomes for schools and students in matters such as the amount of funding a school receives, educational resources, teacher evaluations, and a possibility to enter the “right” college. When the results do not reveal favorable numbers, the public blames policy makers and educators. As a result, the United States invested more than \$1 billion to implement a stricter standardized testing curriculum³. Educational leaders and parents work hard to ensure students become ace test takers.

Is a high stakes testing answer really the right solution? The testing industry has become a powerful one, keeping its existence relevant by influencing parents, students, families, and politicians, driving sales up through lobbying and advertising. The United States spends money to keep up with the other countries where economic systems are different. To excel at the standards signifies an excellent education system. But is emulating countries that are ace test takers a good way to use tax payer’s and government dollars? Spending money on “standards” meant to even out education for all actually keeps minority groups lagging behind⁴. While we spend money and effort on developing skilled testers, our students lack quality instruction. Standards are not what make countries innovative. Instead of attempting to teach our students the skills of ace test takers, we should be putting the money into teaching students how to thrive as 21st century workers in a country where innovation is its greatest asset.

A Brief History of the Funding of Testing

Standardized tests were first used in education in the western world as a form of IQ tests for soldiers in the army. Tests were used to determine college admissions and to mark the end of secondary education⁵. The belief was that tests make the process more objective and scientific. Today, we have standardized tests from the elementary to the graduate level of education. This paper focuses on the elementary to high school level where standardized tests are required by government, school districts, and most colleges. Those tests include the Common Core standards, a set of standards implemented in grades K

³ Resmovits, Joy. “School Testing in U.S. Costs \$1.7 Billion, But That May Not Be Enough.” *HuffPost Education*. The Huffington Post, 29 Nov. 2012. Web. 21 July 2015.

⁴ Hong, Won-Pyo. and Peter Youngs. “Does High-Stakes Testing Increase Cultural Capital among Low-Income and Racial Minority Students?” *Education Policy Analysis Archives* 16.6 (2008): 1-21. Web. 23 July 2015.

⁵ Fletcher, Dan. “Brief History of Standardized Testing.” *Time*. Time, 2015. Web. 21 July 2015.

through 12 to prepare students for college and the workforce⁶, the PISA (which tests 15 year olds worldwide⁷), and in high school during the college admissions process—the ACT and the SAT—college admissions tests.

The culture of learning to pass these tests has evolved into a business – both informal and formal. One can get a Pearson book that gives you the “secrets” of obtaining a high score on the ACT/SAT. There are tutors and other services for hire that advertise an assured high score on college admission exams. Some simply cheat. In other countries, cheating is a solution to overcome high stakes barriers⁸.

In 2001 No Child Left Behind was enacted by President Bush and since then the country has seen a 64% increase in spending on testing for the standards⁹. The Department of Education’s budget also went up \$30 billion in thirteen years from 1997 to 2010. As the importance of the SAT for college admissions goes up, so does the profit of the College Board, an organization created to administer the standardized test. There are concerns the organization is making money off parent and student test anxiety. Its lead competitor company, ACT Inc., made \$274 million in revenue in 2010¹⁰. While these organizations say costs for these tests may be cheaper than paying for college classes, students still opt out of taking tests.

Texas taxpayers for example paid \$93 million for student testing in 2011¹¹. As the Common Core standards progresses, technology is to be added to the mix of supplies. Computers will be testing students, although humans are still needed to grade the tests. This is reported to increase spending as the type of testing changes. The Common Core is refocusing to narrow in on “critical thinking, problem solving, and analytic skills”. And with more “open ended questions, you get into three, four, five thousand dollars per question” to create and manage the difficulty of the question and change it from year to year¹².

⁶ “The Common Core FAQ.” NPRED. National Public Radio, 27 May 2014. Web. 22 July 2015.

⁷ “About PISA.” *OECD*. OECD, 2015. Web. 26 July 2015.

⁸ Edwards, Haley Sweetland. “Chinese Nationals Accused of Vast SAT Cheating Conspiracy.” *Time U.S. Education*. Time, 28 May 2015. Web. 26 July 2015.

⁹ Harrington, Elizabeth. “Education Spending Up 64% Under No Child Left Behind But Test Scores Improve Little.” *CNSNews*. CNS, 26 Sept. 2011. Web. 15 Aug. 2015

¹⁰ Lorin, Janet and Lisa Wolfson. “Not-for-Profit Board Getting Rich as Fees Hit Students.” *BloombergBusiness*. Bloomberg, 17 Aug. 2011. Web. 13 Aug. 2015.

¹¹ Martinez, Nancy. “TAKS Test Taking a Bite Out of Budget?” *ValleyCentral*. Valley Central, 28 April 2011. Web. 13 Aug. 2015.

¹² Scott, Amy. “With Common Core Testing, You Get What You Pay For.” *Marketplace*. Marketplace USC, 9 Feb. 2015. Web. 14 Aug. 2015.

Despite the efforts to pour more money into the testing culture, standardized testing does not come up with favorable results. Taxpayer money is used in ways that prove unproductive.

The high stakes, anxiety-inducing culture of standardized testing is on the rise in recent years. No Child Left Behind required all children pass a minimum level of proficiency and drove teachers¹³ to teach to the test. Teachers and districts alter curriculum depending on the student, sometimes unfairly. Michele Moses and Michael Nanna, authors of “The Testing Culture and the Persistence of High Stakes Testing Reforms” report that “some students are ignored because they have little hope of passing an exam, other students are placed dubiously in special education so as to avoid their being counted in a school’s scores, while others are receiving more than their share of attention because they are on the cusp of passing the exam”¹⁴. The motivation behind the behaviors is based on fear of students not meeting the benchmark, and thus, the district cutting their government funding, or lower teacher evaluations resulting in pay cuts and potential lay offs¹⁵. Implementing the standards involves serious pressure. As the intensity of instructing standards into school districts increased, arguments about actual benefits of standardized testing increased as well.

Those in favor of standardized tests argue tests help to equalize the cultural knowledge of students. Standards in tests are to help minority students and impoverished students – to teach all students a common curriculum – regardless of the student’s background. The authors of the study regarding cultural capital explain that while schools seek to be unbiased, there exists an “Embodied Cultural Capital” in the higher performing schools. Cultural norms and accepted behaviors of upper class and white families are more emphasized and more

¹³ Shavelson, Richard J., Robert L. Linn, Eva L. Baker, Helen F. Ladd, Linda Darling-Hammond, Lorrie A. Shepard, Paul E. Barton, Edward Haertel, Diane Ravitch, and Richard Rothstein. “Problems with the use of student test scores to evaluate teachers.” Economic Policy Institute. Economic Policy Institute, 27 Aug. 2010. Web. 23 July 2015.

¹⁴ Moses, Michele S. and Michael J. Nanna. “The Testing Culture and the Persistence of High Stakes Testing Reforms.” *Education and Culture* 23 (2007): 55-72. Web. 20 July 2015.

¹⁵ Shavelson, Richard J., Robert L. Linn, Eva L. Baker, Helen F. Ladd, Linda Darling-Hammond, Lorrie A. Shepard, Paul E. Barton, Edward Haertel, Diane Ravitch, and Richard Rothstein. “Problems with the use of student test scores to evaluate teachers.” Economic Policy Institute. Economic Policy Institute, 27 Aug. 2010. Web. 23 July 2015.

highly valued¹⁶. Standards are adopted then, to help students gain this knowledge where they may not have access to it (*e.g.* low income schools).

However, some critics of that argument say time spent on teaching to the standards leave less time for tailoring a curriculum specifically to help low income and minority students¹⁷. Minority and impoverished students may have special needs, living outside of the cultural capital and therefore, lack the manners and behaviors that benefit learning in the academic world. A study from MIT even shows the brains of middle school students between high and low income were actually different. The high income students had “thicker brain cortex in areas associated with visual perception and knowledge accumulation” which directly correlates with performance on standardized tests¹⁸. Special attention is needed to address these unequal realities, and standards do not help.

Yet, standardized tests remain a fixture. Moses and Nanna propose three reasons for their endurance: administrative advantage, money, and political influences. Thus, a high stakes culture has been created, fueled by money from parents and school districts to pay for supplies (such as booklets, pencils, supplement materials, graders, and more).¹⁹ But spending more money is not the solution.

Certain Economies May Not Benefit from Just Ace “Test Takers”

When comparing economies, the United States still far surpasses the economies of countries that supposedly score higher on the international tests. We remain the most innovative, being home to Silicon Valley, New York City, and more. The United States also has the most companies in Forbes’ list of “World’s Largest Companies” which are some of the highest earning companies in the world²⁰. Still, more attention and money is put into our testing skills.

¹⁶ Hong, Won-Pyo. and Peter Youngs. “Does High-Stakes Testing Increase Cultural Capital among Low-Income and Racial Minority Students?” *Education Policy Analysis Archives* 16.6 (2008): 1-21. Web. 23 July 2015.

¹⁷ Hong, Won-Pyo. and Peter Youngs. “Does High-Stakes Testing Increase Cultural Capital among Low-Income and Racial Minority Students?” *Education Policy Analysis Archives* 16.6 (2008): 1-21. Web. 23 July 2015.

¹⁸ Trafton, Anne. “Study links brain anatomy, academic achievement, and family income.” *MIT News*. Massachusetts Institute of Technology, 17 Apr. 2015. Web. 20 July 2015.

¹⁹ Moses, Michele S. and Michael J. Nanna. “The Testing Culture and the Persistence of High Stakes Testing Reforms.” *Education and Culture* 23 (2007): 55-72. Web. 20 July 2015.

²⁰ Chen, Liyan. “The World’s Largest Companies 2015.” *Forbes*. Forbes, 6 May 2015. Web. 25 July 2015.

The future economy needs skills that are not measured by standardized tests²¹. 21st century skills include teamwork, creativity, and active problem solving. Despite the apparent need for these “21st century skills”, standardized tests do not measure them. There is an attempt to because the newest set of Common Core standards seeks to implement more practical and “soft” skills (21st century skills) into the curriculum. Politicians responsible for education are reluctant to adopt the new Common Core standards, which seek to include the new 21st century skills. Standardized tests place responsibility on the school districts for improving test scores, and teachers as a result teach to the test and not to a deep-learning curriculum. Schools looking for standardized tests which are relatively cheap, however do not account for “deeper learning” of these new century skills. Other countries may score better than the United States due to even stricter and stronger standards, which do not necessarily make creative leaders. Prioritizing taxpayer’s dollars into less such channels is an inefficient way to raise a leading workforce. In fact, other nations who fare poorer than the United States economically have limited alternatives when it comes to succeeding or failing educational testing standards. Standards are seen as a solution.

Worldwide

Some developing countries that scored higher than the United States on the PISA take strict measures to prepare their students for intense test taking. Vietnam is an example. The country has a two-test system that measures knowledge gained in high school curriculum and for university entrance readiness. These two tests are now being combined into one. Vietnam’s Ministry of Education and Training made that decision just little under one year ago. The one test will account for a student’s knowledge in high school as well as their entrance exam for any college located in Vietnam²².

Even the officials of the education sector do not fully agree with the benefits that high emphasis on test taking has had on students. Vietnam’s deputy education commissioner sees flaws even in the current system. Students are very good at taking tests but do not walk out with knowledgeable skills on teamwork and leadership. “The Vietnamese people’s productivity is about 20 times lower than that of American people” states the Asian Productivity Organization’s 2012

²¹ Hilton, Margaret. “Preparing Students for Life and Work.” *Issues in Science and Technology* 31.4 (2015): 63-66. Print.

²² Tran, An Thi My. “Vietnam: Can One National Exam Test All?” *The World Bank: East Asia & Pacific On the Rise*. The World Bank Group, 1 Oct. 2014. 22 July 2015.

report²³. The deputy summarized by saying that the Vietnamese system is built on learning how to pass exams. And Vietnam's PISA scores reflect only the best test takers, while poor and disadvantaged students most likely drop out²⁴. Money becomes an edge influence in winning students private tutoring spots. Vietnam's education is also "corrupt" at elite schools in Vietnam, selling spots for \$3,000. Despite focusing money on testing, Vietnam's students are not coming out with the abilities to thrive in a 21st century world and still lag behind a wealthier country such as the United States.

Even worse, India seems to have cracked down on standardized tests with the recent cheating scandal in Bihar, where a picture was captured of parents going to such lengths as climbing three story buildings to help children pass exams by providing them with cheat sheets. Over 300 people were arrested. More than 700 students were expelled²⁵. Indian schools emphasize memorization and quoting facts from textbooks instead of creative problem solving²⁶. The high need of standardized testing and the possible incentives for passing the tests offer motivation for cheating that could be avoided if the system were designed to measure critical thinking and skills that demonstrate originality. These are the great lengths families and students take to find a path out of poverty.

The United States is the wealthiest yet still implements the culture of standardized tests. Some say standardized tests are relatively cheap²⁷. Yet in recent years states spent an estimated \$1.7 billion on testing²⁸. In 2002, the Department of Education set aside more than \$400 million for the testing industry to administer these tests²⁹. Those millions could go into finding new ways of education that develop and value creative problem solving. While the solution may not be to eliminate tests altogether, enforcing such an extreme set of standards surely is not the most effective means of producing an outstanding workforce. Unfortunately, taking standards out of the picture may be difficult.

²³ Ravitch, Diane. "Vietnam Wallops U.S. on Test Scores But Vietnamese Educators Scoff at Tests." *HuffPost Education*. The Huffington Post, 15 May 2015. Web. 22 July 2015.

²⁴ M.I. "Very good on paper." *The Economist*. The Economist, 12 Dec. 2013. Web. 14 Aug. 2015.

²⁵ "India arrests hundreds over Bihar school cheating." *BBC News*. BBC, 21 March 2015. Web. 23 July 2015.

²⁶ Dhillon, Amrit. "In India, exam cheating is just a symptom." *The Globe and Mail*. The Globe and Mail, 30 Mar. 2015. Web. 23 July 2015.

²⁷ Moses, Michele S. and Michael J. Nanna. "The Testing Culture and the Persistence of High Stakes Testing Reforms." *Education and Culture* 23 (2007): 55-72. Web. 20 July 2015.

²⁸ Resmovits, Joy. "School Testing in U.S. Costs \$1.7 Billion, But That May Not Be Enough." *HuffPost Education*. The Huffington Post, 29 Nov. 2012. Web. 21 July 2015.

²⁹ "The Testing Industry's Big Four." *Frontline PBS*. PBS Online, Mar. 2002. Web. 19 July 2015.

The Economics of the Test Taking Industry

The United States relies heavily on standardized tests to assess students from kindergarten through the high school college admissions process, and almost necessitates the use of supplementary resources to achieve competitive standards. As a result, the test support industry flourishes. Getting materials such as the ACT prep guide from Pearson results in generated profits. The testing industry is estimated to be about \$2 billion³⁰. There was a 3,000% increase in the amount in just 1997 to 1998 alone³¹. As Moses and Nanna state in their study, “Indeed, testing has become big business in the United States, and the testing industry, like many other industries, is frequently bottom-line profit driven and has benefited dramatically from privatization.”³² Not surprisingly, there continues to be efforts to keep testing in the picture.

The industry encourages more and new standards to ensure the testing economy remains relevant and needed. It spends millions of dollars to lobby policy makers to keep testing³³. The testing industry is run by the “The Big Four”: Pearson Education, Educational Testing Service (ETS), Houghton Mifflin Harcourt, and McGraw Hill. Pearson alone spent \$8 million lobbying from 2009 to 2014 as well as paying for “luxury trips” for school officials³⁴.

It is ethically questionable to allow the privatized testing industry to influence standards. It distracts educational leaders from making a fair decision if lobbyists tempt these leaders with expensive trips and gifts. It is unfair to implement a set of standards not set by those who will be tested themselves, because once the standards are accepted, such as in the Common Core, it is up to the parents and school districts to meet those standards.

Tests and Personal Finances

As test makers push to keep their existence a necessity, they also push for supplemental materials to be bought along with the tests. Parents and school districts have the option of choosing to aid their students with supplemental

³⁰ Strauss, Valerie. “Big education firms spend millions lobbying for pro-testing policies.” *The Washington Post*. The Washington Post, 30 Mar. 2015. Web. 24 July 2015.

³¹ “The Testing Industry’s Big Four.” *Frontline PBS*. PBS Online, Mar. 2002. Web. 19 July 2015.

³² Moses, Michele S. and Michael J. Nanna. “The Testing Culture and the Persistence of High Stakes Testing Reforms.” *Education and Culture* 23 (2007): 55-72. Web. 20 July 2015.

³³ Strauss, Valerie. “Big education firms spend millions lobbying for pro-testing policies.” *The Washington Post*. The Washington Post, 30 Mar. 2015. Web. 24 July 2015.

³⁴ Strauss, Valerie. “Big education firms spend millions lobbying for pro-testing policies.” *The Washington Post*. The Washington Post, 30 Mar. 2015. Web. 24 July 2015.

materials to pass these tests for college and to help tutor for the state standards. Parents and school districts may provide more materials, a set of flash cards, text books, and practice tests for their students to better prepare them and push them towards higher scores. The catch is they charge money for those items. The parents and districts that can afford these items increase their chances of scoring higher. Minority and impoverished schools cannot afford those materials, and their school may even be shut down, as No Child Left Behind states³⁵.

Moses and Nanna explain, "Following this logic, standardized tests predict success in college or graduate school, with success in college or graduate school directly resulting in degree completion and professional success once out of school."³⁶ Generally success in professional life leads to higher incomes. Although one study demonstrates GPA as a better predictor of college success, as students with high scores on tests like the ACT and SAT and low GPA do worse than students with lower or average scores and high GPAs³⁷.

Students may receive extra help from tutors. Both parents and school districts may help to ensure their individual students rank higher in the nation. Some parents spend as much as \$2,000 for an SAT tutor during the high school career of two children³⁸. The students in turn may get more funding for their schools, and attend more prestigious colleges. It is questionable whether ranking higher on international testing scores and entering prestigious colleges actually increases economic wellbeing for the country as a whole. A study says that those who attend elite colleges may earn more than those who graduate from state colleges, or those colleges that accept lower test scores. However, what mattered more was the colleges to which a student applied and this factor was a better indicator of later earnings³⁹. The path to success of a student may vary, but the success depends on more qualitative traits than quantitative scores⁴⁰. Luckily, the United States has the resources to support those many paths. The economy is actually not the 29th worst economy despite being 29th on the PISA. In fact, the United States is doing better in many ways. The current atmosphere around

³⁵ Klein, Alyson. "No Child Left Behind Act: An Overview." *Education Week*. Education Week, 10 April 2015. Web. 26 July 2015.

³⁶ Moses, Michele S. and Michael J. Nanna. "The Testing Culture and the Persistence of High Stakes Testing Reforms." *Education and Culture* 23 (2007): 55-72. Web. 20 July 2015.

³⁷ Sheffer, Sarah. "Do ACT and SAT scores really matter? New study says they shouldn't." PBS Newshour. PBS Online, 18 Feb. 2014. Web. 24 July 2015.

³⁸ Briody, Blaire. "SAT Tests: Another Drain on the Family Budget." *The Fiscal Times*. The Fiscal Times, 1 May 2013. Web. 17 Aug. 2015.

³⁹ Weissmann, Jordan. "Does It Matter Where You Go to College?" *The Atlantic*. The Atlantic, 17 May 2012. Web. 23 July 2015.

⁴⁰ Bruni, Frank. *Where You Go Is Not Who You'll Be*. New York: Grand Central, 2015. Print.

testing encourages spending personal dollars on materials that are not required in the long term to succeed in one's career financially.

If the current system were to reduce the importance of tests, families could save money and focus on deeper learning experiences, perhaps saving for experiential learning trips instead of materials. The stark gap between the scores in wealthier families and those families with a lower income would be less relevant to a student's chances of getting accepted into a high ranking college. Competition is fueled by the necessity for tests, and favors those with more money. It would be worth more to invest in resources that could prepare students for accessing 21st century skills regardless of test scores i.e., to prepare for work life.

In developing countries, however, taking tests seem to be the key in getting out of poverty. In countries where standardized tests may be the only way to get out, like Vietnam and India, students work hard to ensure their scores are among the highest so they may be accepted into a better college and later get a job, which may be their ladder out of poverty⁴¹. Getting a child a good education may prompt parents to go to great lengths.

The Ethics of Funding Testing of Questionable Value

Spending time and money on high stakes testing detracts attention from spending efforts in creating new and innovative ways of education.

Some say spending \$1 billion on standardized tests is not enough⁴². Though how much will be enough until spending multi billion dollars is justified? If spending the \$1 billion is driving teachers to view students in terms of passing standards while leaving minority groups behind, then spending more money in standardized efforts could potentially draw line between the 99% and the 1% in the minds of youths. Putting more effort into a system meant for getting non-US citizens out of poverty in their own countries which experience different circumstances is losing sight of what the United States has to offer.

Creativity and originality remain as defining qualities of the United States economy. The country should tap into those forces and design a better education system that trains students for a new, technology centered century. Spending money on improving standardized test scores is less productive in terms of

⁴¹ Sehgal, Kunal. "Bihar Cheating Scandal: What Parents In India Will Do For Good Grades." *CNN Money*. CNN, 20 March 2015. Web. 21 July 2015.

⁴² Resmovits, Joy. "School Testing in U.S. Costs \$1.7 Billion, But That May Not Be Enough." *HuffPost Education*. The Huffington Post, 29 Nov. 2012. Web. 21 July 2015.

educational outcomes. In addition, emulating countries that do better on international standardized tests may be the wrong way to educate Americans. Utilizing taxpayer dollars on funding testing is largely ineffective. Therefore, on a utilitarian basis, it is unethical to reinforce new testing standards. Instead, the money should go towards deeper learning strategies.

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