

equity vs. excellence

Is education still a zero-sum game?

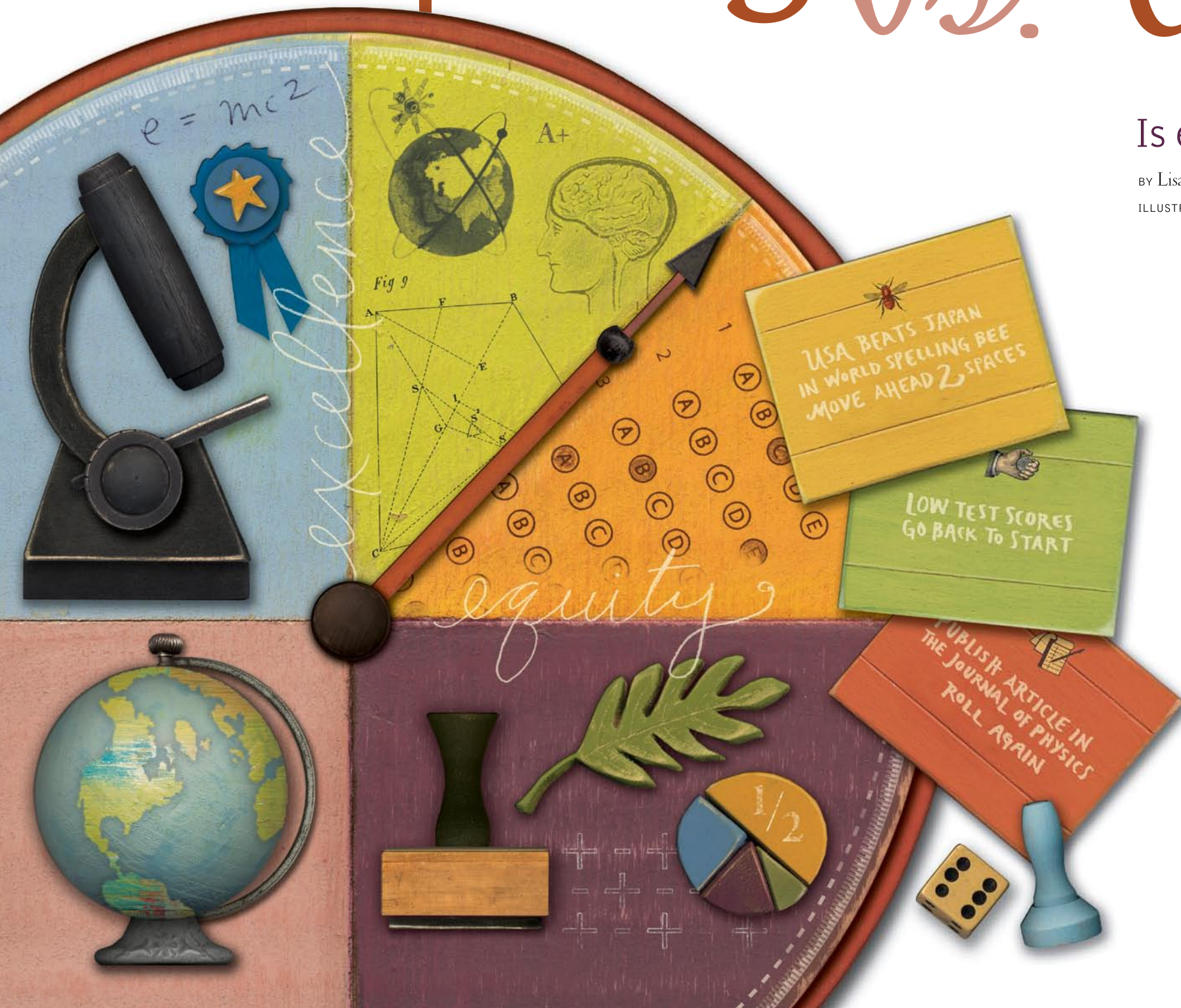
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Since the signing of No Child Left Behind in 2002, closing the achievement gap has topped the nation's education policy agenda. Compliance with the law has consumed vast federal, state and local resources. Now, in the heated debate over NCLB reforms that has preceded the law's reauthorization, an insistent voice has gained attention, amplified by reports on United States competitiveness in the global arena. As a nation, it asks, are we sacrificing educational excellence in our quest for quality public education for all or equity?

The question is not new. For decades, U.S. education policy has oscillated between the priorities of equity and competitive excellence. Policy analysts Frederick Hess and Andrew Rotherham summed up the dynamic in an article for the American Enterprise Institute in June:

"Historically, there always has been an unavoidable tension between efforts to bolster American 'competitiveness' (read as efforts to boost the performance of elite students, especially in science, math, and engineering) and those to promote educational equity. Champions of particular federal initiatives tend to argue that the two notions are complementary, but trends of the last fifty years show that the ascendance of one tends to take attention from the other." ("Can NCLB Survive the Competitiveness Competition?" aei.org)





The United States v. the World

According to *Education at a Glance 2007*, released in September by the Organisation for Economic Co-operation and Development, the United States ranks second in spending on educational institutions as a percentage of GDP. It also spends the most dollars per student, excluding the pre-primary level, at which it is second only to the United Kingdom.

All this spending, however, may be serving neither the equity nor the excellence agenda as well as it might. The U.S. high school graduation

rate of 76 percent is sixth from the bottom—besting only Mexico, Turkey, Spain, New Zealand and Luxembourg. The GED helps to keep the overall U.S. secondary-education attainment rate above the OECD average.

Furthermore, while entry to university-level programs in the United States has increased over the last decade, only 54 percent of entrants obtain a degree. This puts the United States, with New Zealand, at the very bottom of the pack. The average rate among OECD countries is 71 percent, with Japan topping the list at 91 percent.

Of similar concern, U.S. higher-education attainment rates are stagnant. In the 55-to-64-year-old category, the United States has the highest rate of attainment, at 37 percent for 2005. But in the 25-to-34-year-old group, the United States' 39 percent attainment rate ranks tenth, behind countries including Canada, France, Korea and Spain.

These rates have implications for socioeconomic equity: U.S. higher-education graduates in the 25-to-64-year-old age group earn, on average, 75 percent more than their peers with only a secondary education. Only Hungary, the Czech Republic and Portugal have greater earnings gaps for this age group.

The OECD data also shed light on competitiveness issues. For example, the number of U.S. science graduates remains significantly below the OECD average.

The National Science Foundation (NSF) reports that foreign students (defined as those on temporary visas) account for less than 10 percent of computer science and engineering degrees at the undergraduate level. But they earn a third of all science and engineering doctorates in the United States; more than 40 percent of doctorates in math, computer science and agricultural science and 55 percent of engineering doctorates.

Meanwhile, various analyses of 2003 data from the Trends in International Mathematics and Science Study (TIMSS) and the Programme for International Student Assessment (PISA) conclude that by high school, U.S. students fall behind their peers abroad in math achievement, despite high educational investment.

PISA 2003 also found that in the United States, while math performance was below the OECD mean, the impact of socioeconomic background on performance was not significantly different from the OECD average.

Hess and Rotherham describe a pendulum that swings in tandem with other major policy concerns: The Cold War and Sputnik I spurred the competitiveness agenda of the National Defense Education Act (NDEA) of 1958. Less than a decade later, in keeping with the priorities of President Lyndon Johnson's War on Poverty, the Elementary and Secondary Education Act (ESEA) of 1965 made improving education for underprivileged children the lead imperative. The 1980s returned competitiveness issues to the fore, with worries over Japan's technological successes and the country's place in the world helping to galvanize the standards movement.

By the late 1990s, however, collapsing urban school systems had refocused attention on equity. NCLB, a reauthorized version of ESEA passed by Congress in January 2001, marked the culmination of this renewed emphasis. NCLB declares its agenda in its first line: "An Act to close the achievement gap with accountability, flexibility and choice, so that no child is left behind."

After almost 40 years, in other words, the United States is back at the same table, still trying to crack the same tough nut. It's a sobering thought.

"It's probably incorrect to say American education has grown worse over the past few decades," Hess told *The Reflector* in September. "However, spending has tripled over the past 35 years, and American education hasn't improved either. In no case does it seem we're adding a lot of value."

Perhaps an approach that pits excellence against equity is part of the problem.

The Case for Excellence

Those who have preached excellence in the broader educational policy debates typically have had international competitiveness in mind. In this framework, excellence advances U.S. interests economically, politically and militarily.

This idea of competitive excellence informed "Rising Above the Gathering Storm," a 2005 expert-panel report solicited by the federal government. The report in turn helped bolster support for the 2006 American Competitiveness Initiative (ACI), which called for \$136 billion in federal spending over the next decade. In August 2007, President Bush signed a related bill, with a grammatically

less-than-excellent title, but a snappy acronym: the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education and Science Act, a.k.a. America COMPETES.

ACI and America COMPETES authorize billions of dollars in spending on science, technology and math, but leave the actual allocations up to future legislation. Neither points much money in the direction of K-12 education.

"Despite the rhetorical centrality of education in the policy debate on competitiveness," Hess and Rotherham note, less than 1 percent of ACI "was earmarked to support math, science and technological education in K-12 schooling, and even that amount has fallen prey to political infighting among various members of Congress."

In short, while competitive excellence generates concern, especially in the business community, it does not seem to be making lasting headway in education policy during these tight budgetary times.

Excellence in education also has advocates who approach it from a wider angle. They understand excellence as an educational imperative as well as a national economic and strategic advantage.

Camilla Benbow, Peabody's Patricia and Rodes Hart Dean of Education and Human Development, and psychology Professor David Lubinski co-direct the Study of Mathematically Precocious Youth (SMPY), an ongoing 50-year longitudinal study of intellectual talent. Their research has found that gifted learners who experience educational acceleration (which encompasses a host of measures, such as early entrance to school, grade-skipping, subject-specific acceleration and curriculum compacting) have high levels of both achievement and educational satisfaction. In other words, gifted education ends up benefiting both society and the individual.

When it comes to gifted education, many object to acceleration interventions as unnecessary or, worse, unfair. Benbow and Lubinski reject these assumptions. Their research on gifted children is grounded in the idea of "appropriate developmental placement," which they describe as "providing students with educational opportunities tailored to their rates of learning."

"Appropriate developmental placement is beneficial for all children," says Benbow, who serves on the National Science Board and is also vice chair of the National Mathematics Advisory Panel. "Every child should have the opportunity to learn something new every day."

Benbow and Lubinski also caution against conflating giftedness with privilege.

"There are many gifted kids coming from low socioeconomic-status backgrounds," Benbow points out. "When you remove programs for the gifted, you don't hurt kids from highly advantaged, educated, middle- and upper-middle-class backgrounds as much. Those parents can find and afford alternatives. What about children from lower SES, or less highly educated families? You are disproportionately hurting those kids the most."



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"The Achievement Trap: How America is Failing Millions of High-Achieving Students from Lower-Income Families," a report released in September by the Jack Kent Cooke Foundation, echoes this idea. Though it looks at a broader band of students, it, too, calls into question the assumption that high-achieving students can " fend for themselves" while the system concentrates on basic proficiency.

"There are far fewer lower-income students achieving at the highest levels than there should be, they disproportionately fall out of the high-achieving group during elementary and high school, they rarely rise into the ranks of high achievers during those periods, and, perhaps most disturbingly, far too few ever graduate from college or go on to graduate school," the report summarizes. "Unless something is done, many more of America's brightest lower-income students will meet this same educational fate, robbing them of opportunity and our nation of a valuable resource."

Rethinking Equity

Data from the 2007 National Assessment of Educational Progress, released in late September, offer further evidence that current policies fall short in terms of equity and excellence. For example, the average fourth-grade math score hit its highest level in 17 years, and the percentage of fourth graders at or above proficiency increased 7 points since 2003—but that still only brought the proficiency rate up to 39 percent. In reading, proficiency rates and achievement gaps improved slightly since 2002 for fourth graders, but deteriorated slightly or stagnated for eighth graders.

“A big problem with NCLB is its relatively narrow focus on kids at or above the proficient level,” says Peabody’s Tom Smith, an assistant professor of public policy and education. Smith’s research focuses on how organizational and policy

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contexts affect teaching and learning. “The accountability system is centered around that, and in many cases, that level is set pretty low. It creates a big incentive for districts and schools to focus on those kids just below proficiency level—but not necessarily on all low-performing kids. If you can move some of those kids just up and over, you might just reach your target. This doesn’t put much pressure on kids in other parts of the distribution.”

Smith notes that though there is a 100 percent proficiency target in place for 2014, schools tend to focus on the short term.

“Schools don’t necessarily do that,” Smith says. “But if you have limited resources, that’s where you have to concentrate.”

Rich Milner, Peabody’s Betts Assistant Professor of Education and Human Development, researches race and equity issues in urban schools. He does not view NCLB as part of an equity agenda. He also thinks concerns over competitiveness are overblown, with more students in AP classes and qualified for elite colleges than ever before.

“Equity has to do with social justice and suggests that organizations should go beyond normal means to achieve a set of goals,” Milner says. “NCLB is designed to encourage educators to do what most would consider ‘appropriate’ for schools—that is, teach all students. This is not necessarily equity by definition.”

Milner’s greater concern is whether schools are “pushing students to reach their full capacity, tapping into the multiple levels of knowledge and expertise they bring to the classroom.” NCLB, he says, does not encourage that; rather, its testing regimen attempts to measure just one dimension of knowledge. His most recent research, published in the fall issue of *Theory Into Practice*, identifies five principles teachers can use to “teach and empower” African American male students (see pages 12 and 13).

“Equity and excellence are certainly not dichotomous in my perspective; they go hand in hand,” Milner says. “Does equity mean sameness? Do we want all our students to learn the same thing? Or do we want each child to reach his or her full potential?”

Though they approach the topic from different research, Milner and Benbow use similar language to talk about the excellence-equity relationship. “Giving everyone the same thing is inequitable,” Benbow says. “Excellence versus equity is a false dichotomy. Can you have excellence without equity? And what’s equity without excellence?”



Why Not Both?

The Programme for International Student Assessment (PISA) Report 2003 found that some countries bucked trends to score both high math performance levels and low socioeconomic impact levels.

“PISA suggests that maximising overall performance and securing similar levels of performance among students from different socioeconomic backgrounds can be achieved simultaneously,” reads the report’s chapter on the relationship between achievement and socioeconomic background. “The results suggest therefore that quality and equity need not be considered as competing policy objectives.”

Professor Stephen Heyneman specializes in international educational policy at Peabody, after spending 21 years at the World Bank. He agrees that some countries do pursue both objectives well. The United States is just not one of them.

“We don’t pay enough attention to our brightest students,” Heyneman says. “We are embarrassed to segregate them of, and that reflects our culture more than anything else. We are egalitarian.”

Heyneman does not see any quick fixes to the U.S. system’s combination of wide achievement gaps and disappointing achievement levels, though he thinks concerns over the latter’s impact on economic competitiveness are overstated. Many of the policies that his research indicates would help address these issues are still not politically or culturally palatable in this country. They include national assessment standards; national curricula; more in-school tracking; good-teaching incentives in teacher pay; closures of failed schools; and higher standards that would, at least in the short term, lower performance statistics such as test scores and graduation rates.

Retiring the Pendulum

In reforming NCLB, will educational policymakers move toward integrating excellence and equity agendas for all students? It’s a tall order, given the history of educational policy trends. In any case, we likely will not find out until the dust from the 2008 elections finally settles. Many observers predict that Congress will not make any significant changes to NCLB until then. In the meantime, interested parties will continue to push their competing agendas, with students in the middle, dodging the pendulum.



Gifted Youth, Accomplished Adults

The Study of Mathematically Precocious Youth (SMPY)—a 50-year longitudinal study now in its 36th year—is co-directed by Dean Camilla Benbow and Professor David Lubinski. The study has found that giftedness in youth can significantly predict achievement in adults. For example, 30 percent of the study’s 12-year-olds who scored 500 or above on the verbal or math SAT went on to earn doctorates within 20 years; 50 percent of those who scored above 700 did so. This compares to a 1 percent base rate for earning a doctorate in the United States.

SMPY relies on “above-level” testing—in this case, SATs administered to 12- and 13-year-olds—to take a closer look at students. When age-designated tests are used to identify giftedness, the children seem alike, because their scores cluster at the top of the distribution; one test result looks very much like the next. When the students take tests above their learning levels, variations in performance in different categories reveal the distribution of their distinct abilities.

SMPY’s latest findings, published in November’s issue of *Psychological Science*, focus on differential abilities within the top tier of gifted youth and on the manifestation of these abilities in later accomplishment.

“Results showed that distinct ability patterns uncovered by age 13 portend contrasting forms of creative expression by middle age,” write Benbow, Lubinski and doctoral student Gregory Park. “Whereas ability level contributes significantly to creative accomplishments, ability tilt is critical for predicting the specific domain in which they occur.”

The 2,409 adults included in this latest analysis, who were identified by SMPY as gifted at least 25 years earlier, have made significant contributions to their fields, including 817 patents and 93 books between them. They also, according to the report, debunk the idea that standardized tests are not predictive of “real-world success later in life.”

For more information about SMPY, visit smpy.vanderbilt.edu.