Learning from the World: Achieving More by Doing Less

Countries that score higher in international comparisons than does the U.S. also require less time in school, assign less homework, and use less high-tech gadgetry. Mr. Baines argues that maybe it is time we learned from them.

BY LAWRENCE BAINES

AT THIS moment, in school districts throughout the United States, initiatives are being launched to extend the school day, increase homework, integrate technology, and require more high-stakes testing. The assumption underlying these initiatives is that more and more — more time in school, more homework, more technology, and more high-stakes testing — will produce smarter, better-prepared students who, in turn, will help guide the nation through the tumultuous and uncertain 21st century.

To realize the ideal of an educated, productive citizenry, however, many countries around the world are employing radically different approaches. Instead of executing a strategy of more and more, some countries have decided to educate their young people by doing less. Because the test scores of students from these countries routinely eclipse the scores posted by American students in two international comparisons of student achievement — Trends in International Math and Science Study (TIMSS) and Programme of International Student Achievement (PISA) — an investigation of educational practices in higher-achieving countries might prove instructive. Four areas where the policy and practice in high-achieving countries run counter to current practice and policy in the U.S. are as follows: 1) time spent at school, 2) homework, 3) technology, and 4) schools as agents of social change.

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TIME SPENT IN SCHOOL

Students in public schools in most countries in Western Europe, Canada, Mexico, Korea, Japan, and Singapore — all members of the Organisation for Economic Co-operation and Development (OECD) — spend an average of 701 hours per year in school. In Finland, where students have scored near the top in international comparisons of achievement for a number of years, students spend only 600 hours in school. In the United States, by contrast, children go to school for six or more hours per day, five days per week, for approximately 185 days spread over a period of nine or 10 months.

The average time spent at school in the U.S. totals over 1,100 hours, almost double that of children in Finland. By the time children reach the age of 14 in Finland, they will have gone to school for 2,500 fewer hours than students in America (the equivalent of two to four years of schooling). Despite much longer school days, American students routinely score 10% to 20% lower than Finnish students on international tests of achievement.

Experimental studies have repeatedly found no correlation between time spent at school and levels of achievement.[1] Of course, as any teacher in American public schools can attest, time at school is often wasted on performing nonteaching tasks, organizing paperwork, maintaining discipline, and keeping students "busy." Some of the more prestigious private secondary schools in America schedule classes in the fashion of universities — 90-minute periods that meet twice each week, with one day a week set aside for advising and one-on-one tutoring. If such a schedule were adopted in public high schools, for example, total instructional hours in America would drop sharply. But such a transformation would mean a departure from the traditional schedule and a retreat from the daily array of "professional development opportunities" such as hall duty, lunch supervision, bus detail, parking lot patrol, and detention hall supervision.

HOMEWORK

As with instructional hours spent in school, America also leads the world in assigning homework — a whopping 140 minutes per week in mathematics for secondary students. Despite this extra workload, American students are renowned for posting mediocre scores on math tests. For example, the average score for an eighth-grade American student on the mathematics portion of the TIMSS in 2003 was 502. In contrast, the average Korean eighth-grader scored 584. While many Americans may suppose that Korean teachers require more from their students, in actuality, Korean teachers assign *20 minutes less homework* per week than their American counterparts. Apparently, Korean students are learning more mathematics by doing less homework.

This should not be all that surprising. As a rule, time spent doing homework will be unconnected to academic achievement if the time is not spent productively. Because most American teachers tend to assign worksheets and exercises from textbooks for homework, a student's level of engagement during the long evening hours of working at home may be less than optimal. Although much has been written about academic learning time (the time students are genuinely engaged in learning), many teachers are still more concerned with "keeping up" than with making learning interesting or relevant for their students. Obviously, as teacher salaries are increasingly tied to students' performance on tests, the urge to "cover the curriculum" to be tested is understandable. However, lack of engagement inevitably leads to apathy, frustration, and boredom.

In examining homework policies around the world, researchers have concluded, "The relationship between national patterns of homework and national achievement suggests that . . . more homework may actually undermine national achievement."[2] Many bleary-eyed American students would wholeheartedly agree.

TECHNOLOGY

A study of the integration of technology into American classrooms over the past century reveals that claims for new paths to achievement come as a matter of course with the development of new machines. In the past, some researchers have claimed academic gains associated with the use of film, radio, the tape recorder, videotape, television, and even the overhead projector. Apparently, after the novelty of a machine fades, so do claims that interactions with it will yield dramatic gains in achievement. For example, few researchers anymore would contend that an overhead projector enhances student achievement through the sheer power of its technology. Yet many schools in America have spent billions of dollars over the past 20 years under the illusion that providing students with access to computers and the Internet would somehow enhance achievement. While the universe of knowledge available via the Internet is indisputably vast, schools have been forced to restrict student access because too many websites feature pornography, ultra-violent images, or other material unsuitable for children. As a result, if they are used in schools at all, computers have taken on the role formerly occupied by a multivolume set of encyclopedias — a storehouse of concise, neatly categorized information used once or twice per year for research projects.

Undeniably, having access to the latest technologies is preferable to being relegated to a barren one-room schoolhouse with only a small, cracked chalkboard. However, technologies come with a bundle of benefits and tradeoffs. Ten years ago, the reason some high schools and universities began requiring students to come to class with laptops is that administrators believed laptops would enhance student achievement. Ten years later, the reason these same high schools and universities have stopped requiring laptops is that no evidence

has surfaced to substantiate that they made any difference.

In the 2003 administration of PISA, the factor most strongly associated with high scores on reading, problem solving, and mathematics was not the presence or absence of technology, but the number of books to which a student had access. Across categories of race, gender, and nationality, the more books present in the home, the higher a student's level of achievement.

Unfortunately, in most American schools today, books are handled as if they were artifacts from a museum. Consider the following policies now enforced in many schools:

- Students are often forbidden to take books (even textbooks) home.
- If students are allowed to take books home, no more than one may be checked out of the library, and it may be checked out for only a short duration.
- Books should be used with care (students may not write in them).

School libraries, once repositories for books, have morphed into multifunctional media centers. As a result, budgets for print materials have been reduced in order to keep the computers running. Although school libraries might serve as the sole access point for books in a particular community, libraries in high-poverty urban and rural areas may have precious few books to lend. In addition, school libraries in America usually close soon after the dismissal bell, so that students, parents, and members of the community have no time to browse the shelves or simply sit down and read. Bookless homes remain bookless homes.

In most OECD countries books are not treated as artifacts but are given to students to use as they wish. They can take them home, share them, and — believe it or not — scribble notes in the margins without penalty.

SCHOOLS AS AGENTS OF SOCIAL CHANGE

Perhaps only in America could a strict regimen of standardized testing be considered an antidote to the social problems of the poor and disenfranchised. But No Child Left Behind gained widespread, bipartisan political support by using precisely this logic. While the federal and state governments have focused upon the establishment of school-based initiatives — setting curricular standards, specifying performance outcomes, and integrating technology — other countries have taken a broader approach to social problems. Perhaps leaders of those countries are more familiar with the research that substantiates that differences in academic achievement are more attributable to differences in social background than to variations in standardized testing.[3]

Three dubious distinctions characterize America's poorest students: most hail from one- or no-parent households, they are the least healthy children in the country, and they score at the very bottom on achievement tests. On international achievement tests, more than one in four American students score at the lowest possible level. In Korea, only 9.6% of students score at the lowest tier; in Finland, only 6.8%.

The poverty rate in Finland is 5%, in Korea it is 15%, and in America, it is 12%. From this information, we can infer that America not only is doing an inadequate job of educating students in poverty but also is failing with significant numbers of the nonpoor. In recent decades, underachievement in America has been wholly perceived as a "school problem," and solutions have focused solely on interactions with students during school hours. The latest thinking in the United States has not been directed toward creating more family-friendly policies (such as the Canadian and European tax incentives for stay-at-home parents) or broader social initiatives, but toward putting in place more rigorous and frequent testing. A kid can try to hug a test, but the test will never hug back.

An examination of scores on standardized tests in the United States over the past 50 years reveals no discernible change in student achievement despite myriad efforts at reform. The initiatives of an extended school day, more homework, increased technology, and vigorous standardized testing, in vogue for decades, have done little to enhance achievement, promote positive attitudes, or foster good citizenship. Perhaps it is time to learn from the world, to stop thinking in terms of more and more, and consider what might be achieved by doing less.

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1. Charles W. Fisher and David C. Berliner, eds., *Perspectives on Instructional Time* (New York: Longman, 1985); and Rita Mulholland and Michelle Cepello, "What Teacher Candidates Need to Know About Academic Learning Time," *International Journal of Special Education*, vol. 21, no. 2, 2006, pp. 63-73.

2. David Baker and Gerald Letendre, *National Differences, Global Similarities: World Culture and the Future of Schooling* (Stanford, Calif.: Stanford University Press, 2005), p. 130.

3. See Rosie McNiece, Penelope Bidgood, and Peter Soan, "An Investigation into Using National Longitudinal Studies to Examine Trends in Educational Attainment and Development," *Educational Research*, vol. 46, 2004, pp. 119-36; Jerry Westermeyer, "Predictors and Characteristics of Erikson's Life Cycle Model Among Men: A 32-year Longitudinal Study," *International Journal of Aging and Human Development*, vol. 58, 2004, pp. 29-48; and Betty Hart and Todd Risley, *Meaningful Differences in the Everyday Experience of Young American Children* (Baltimore: Brookes Publishing, 1995).