Stop wasting money teaching millions of students content they already know

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Nearly all aspects of America's schools are built upon age-based grade levels and corresponding grade-level expectations: standards, instruction, curriculum, and assessment, among others. This reinforces the implicit message that performing on grade level is the primary purpose of schooling. Yet it also ignores an important question: How many students already perform one or more years above grade level on their first day of school?

The answer to this question has profound implications for American education policy and for the organization of schools. If a mere 2 percent of students perform above grade level, for example, the present obsession with grade-level proficiency might make sense. But what if it were a far larger proportion? If one in every five students has surpassed that criterion before the school year even starts, policymakers would need

to re-think the merits of an age-based, grade-level focus.

In a recent policy brief, four colleagues addressed this question and found that very large percentages of students (between 15 percent and 45 percent) are performing above grade level—and that these percentages represent staggeringly large numbers of students. In California alone, for example, this group comprises more than 1.4 million pupils.

To reach these conclusions, we examined five assessment data sets. We selected data from the Common Core–aligned but nonadaptive version of the Smarter Balanced assessment from Wisconsin; a computer-adaptive version of the Smarter Balanced assessment from California; the partially Common Core–aligned Florida Standards Assessment; multistate data from the Northwest Evaluation Association's Measures of Academic Progress; and nationally representative data from the National Assessment of Educational Progress (NAEP). This gave us data for three states—California, Wisconsin, and Florida—as well as information on a nationally representative sample of students in grades 4, 8, and 12.

Five different data sets from five distinct assessment administrations provide consistent evidence that very large percentages of students perform above grade level. Based on the Wisconsin and California Smarter Balanced, Florida FSA, and multistate MAP data, we estimate that 20–40 percent of elementary and middle school students perform at least one grade level above their current grade in reading, with 11–30 percent scoring at least one grade level above in math.

Moreover, we also found large percentages of students performing *well* above grade level—more than one grade level ahead. Using MAP data, we estimate that 8–10 percent of Grade 4 students perform at the Grade 8 level in reading/English/language arts, with 2–5 percent scoring at similar levels in math. Relying specifically on the MAP data, one out of every ten fifth-graders is performing at the high school level in reading, and nearly one child in forty at this age is performing at the high school level in mathematics. Because of the MAP test's computer-adaptive format and high measurement ceiling, these results cannot be explained away by the correction that commonly applies to pencil-and-paper grade-level achievement tests. On the latter tests, a fifth-grader with a ninth-grade-level equivalent score amounts to a ninth-grader's completing a fifth-grade test. By contrast, a MAP test score that is equivalent to ninth-grade performance is in fact based on ninth-grade content knowledge and skills.

Converting these percentages to numbers of children provides a sobering picture of the number of students who are not well served under the current grade-based educational paradigm. In Wisconsin alone, somewhere between 278,000 and 330,000 public-school students are performing more than a full grade above where they are placed in school. And as mentioned above, in the much larger state of California, that number is between 1.4 million and 2 million students.

Federal and state education policies are largely irrelevant for this huge number of students. Getting kids to grade-level proficiency has been a focus of U.S. education policy and practice for well over a decade. Yet the U.S. likely wastes tens of billions of dollars each year in efforts to teach students content they already know.

This structure centered on age-based grade levels, therefore, needs serious rethinking. One option is whole-grade or single-subject acceleration. Indeed, this is consistent with the literature, which has documented uniformly positive benefits [when academic acceleration is implemented thoughtfully](). Academic acceleration is particularly beneficial for students pursuing professional careers that require substantial academic preparation and credentialing, a point that has been recognized for more than eighty years. Acceleration would also reduce the difficulty of differentiated instruction because students within a given classroom are selected to be far more homogeneous in ability and prior knowledge than they are in the traditional system.

Based on all of this, our initial question—How many students are learning above grade level?—needs to be extended. The more important questions may be:

1. How should we reorganize our schools, now that we know that large numbers of these students exist?
2. How can we best meet these students' learning needs, if they already have mastered much of the year's content before the year has even started?
3. How can schools balance the potential for excellence against the need to achieve basic proficiency, when the variation in student achievement within classrooms and schools is so vast?

The current K-12 education system essentially [ignores the learning needs]() of a huge percentage of its students. Knowing this, twenty years from now we may look back and wonder why we kept using age-based grade levels to organize K–12 education for so long.

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