Common Core and America’s High-Achieving Students

BY JONATHAN A. PLUCKER

HIGHLIGHTS

While the merit and politics of the Common Core State Standards (CCSS) have been much debated and discussed, one topic has been virtually ignored: What do the standards portend for America’s high-ability students? This brief addresses that question and provides guidance for CCSS-implementing districts and schools as they seek to help these youngsters to reach their learning potential. Four key points emerge.

1. Common Core is no excuse to ditch gifted services.

One key challenge for the gifted ed community is that the CCSS are indeed being used in some places to justify reducing or even scrapping gifted education services on grounds that the new universal standards are more challenging than what came before them. No doubt the level of rigor will rise in many states for standards, curriculum, and tests alike. But that doesn’t mean they’ll adequately challenge the most advanced students, girls and boys working well above their grade level. Schools need to take additional steps if they are properly to serve those children, some of whom may already be quite a considerable distance down the path to “career and college readiness.”

2. State and local officials should get rid of policies that hurt gifted students and strengthen those that help them.

Many districts and schools have formal or informal policies that limit the learning of advanced pupils. For instance, some states cap how far students can progress within the curriculum in one school year or base kindergarten entrance on age rather than readiness. Some districts have added prohibitions on within-class ability grouping. Many discourage grade-skipping and other forms of acceleration. Such “anti-excellence” policies, often inscribed in state education laws and regulations, are nearly always bad for high-ability children and must be removed if the Common Core standards are to be successfully implemented for them, too.

3. Schools should work harder to make differentiation “real.”

Differentiating instruction by students’ abilities and/or achievement levels is a skill set that few teachers have mastered. But it won’t get any better if we throw our hands up. The few hours (at most) of annual professional development spent on learning how to educate gifted students is clearly not sufficient; we need more time and higher-quality training devoted to curricular and instructional differentiation by ability level. Initial teacher preparation programs need to take this challenge seriously in ways that most today do not. Teachers need the opportunity to plan together to meet the needs of their high-ability learners. And principals need to build this into their schools’ priorities.

4. Schools should make use of existing high-quality materials that help teachers adapt the Common Core for gifted students.

There are plenty out there! A number of organizations and gifted education experts, including the National Association for Gifted Children, have published various units, lessons, tips, and guidelines to help educators build on and extend the Core for high-ability children. Let’s put them in the hands of teachers. Likewise, educators of the gifted can serve as key resources for their districts.
Introduction

The creation, adoption, and implementation of the Common Core State Standards (CCSS) is one of the major American educational initiatives of the past several decades. The result of a collaboration between the National Governors Association and Council of Chief State School Officers, the standards are intended to “establish clear, consistent guidelines for what every student should know and be able to do in math and English language arts from kindergarten through 12th grade.” Currently, forty-three states and the District of Columbia are committed to these ambitious standards—far more rigorous than almost any state had developed on its own—and thereby send a strong signal that readying students for college and careers is now the appropriate target for America’s public education system.

Yet the Common Core elicits strong reactions—not all of them positive. Proponents claim a long list of benefits to adopting a set of de facto national curriculum standards: creating common, rigorous expectations across states (especially important in an increasingly mobile world), lowering education costs, raising assessment quality, and—as a result of all these factors—potentially increasing student achievement to world-class levels. At the same time, a sizable platoon of doubters and detractors offers a mix of criticisms from both the right and left. Opponents complain about federal overreach due to the Obama administration’s efforts to encourage adoption of the standards and accompanying assessments. They are concerned that the early childhood standards may not be developmentally appropriate. And they worry that the standards may not actually be rigorous enough, especially for students planning to attend selective universities.\(^2\)

**FIGURE 1 AMERICA’S EXCELLENCE GAP**

Percent of Advanced Scorers on NAEP Grade-8 Math Assessments by Race/Ethnicity, 2000–2013

Note: Performance of Native American students closely mirrors that of Hispanic students and is not included for purposes of visual clarity.
With or without the Common Core, however, there’s little doubt that America’s high-achieving students could be performing better, that we could and should have many more of them, and that a more diverse population of young Americans could and should enter their ranks. Multiple international comparisons reveal disparities in how our most talented students achieve relative to their peers in other countries. For example, on the 2011 TIMSS international assessment, over 30 percent of fourth-grade students scored “advanced” in mathematics in Singapore, Taiwan, South Korea, Hong Kong, and Japan, versus only 13 percent in the United States. And both international and domestic sources attest to America’s internal “excellence gaps”: large and still-growing racial and socioeconomic differences in the numbers of high achievers.

What does the Common Core portend for America’s high-ability students? Will it strengthen or weaken their education? Those are the questions I address here, in response to worries voiced by some in the world of “gifted and talented education”—educators and parents alike—that implementation of the Common Core standards could turn out badly for these children. One fear is that the Common Core will be used as a justification for reducing or even scrapping gifted education services on grounds that the standards are more challenging than whatever came before them. I address those concerns and suggest ways that schools can implement the Common Core with an eye toward serving high-achieving students. This guidance is based on my own experience as a practitioner and researcher in the field of gifted education, as well as interviews with twenty advocates for gifted education, assessment specialists, school district leaders, K–12 teachers, curriculum specialists, professional development leaders, differentiation experts, and educational researchers, among others.

**Does Common Core Make Gifted Education Unnecessary?**

It has been widely reported that some districts are using the implementation of the Core as a reason to abolish gifted education programs, ability grouping, and related strategies for advanced education. In a typical example, the superintendent in one Illinois district justified elimination of gifted education programming by citing the rigorous standards of the Core. Another district eliminated its programming for budgetary reasons but then used the Common Core to assuage parent concerns, with a district administrator explaining that the standards “require schools to teach differently. We will be focused on going deeper within the subject matter to elicit higher levels of learning. Please note that being challenged doesn’t always mean doing something different.” Other districts have been more direct, with one superintendent noting in an e-mail to the media that the “Common Core will cost close to $1 million to implement, and that’s where funding will have to go”; local officials subsequently scrapped their high school gifted program.

Given that the standards are intended to represent grade-level learning, curricula and assessments based on them will, by definition, not challenge those students already working above grade level.

Such assertions are based on the assumption that “regular” classroom instruction will be sufficiently challenging for gifted students, both because the standards are more rigorous than those they replaced and because new assessments aligned with the Core will be more challenging.

There’s no doubt that the new standards and tests will be more rigorous in most states. But that doesn’t mean they’ll be suitably challenging for our most advanced students—those working well above their grade level. Given that the standards are intended to represent grade-level learning, curricula and assessments based on them will, by definition, not challenge those students already working above grade level. These students are so far ahead, or are such quick learners, that even a more demanding one-grade curriculum won’t challenge them for a full year.

Indeed, the CCSS materials address this point directly, reinforcing that the standards are intended to be the starting point for gifted students, not the finish line. Within the Common Core’s English language arts
standards, the developers note that "[t]he Standards do not define the nature of advanced work for students who meet the Standards prior to the end of high school...The Standards set grade-specific standards but do not define the intervention methods or materials necessary to support students who are well below or well above grade-level expectations....However, the Standards do provide clear signposts along the way to the goal of college and career readiness for all students." Similarly, the overview to the math standards notes that "no set of grade-specific standards can fully reflect the great variety in abilities, needs, learning rates, and achievement levels of students in any given classroom." In my conversations, the fact that the Core is a floor and not a ceiling was the most frequent concern (i.e., although calculus is addressed in the appendix of the math standards, the standards are only fully developed through Algebra 2). Even a generally sympathetic analysis in 2011 by the University of Pennsylvania’s Andrew Porter and colleagues concluded that the Common Core standards, while in many ways an improvement over previous state standards, do not have the same math coverage as the most ambitious of some previous state standards. The coverage concerns, coupled with teachers’ inability to differentiate curriculum and instruction (see more below), provide evidence that the Common Core is not “gifted sufficient,” and that using the implementation of the Core to advocate for reduction in services doesn’t make sense. Using the Core to eliminate advanced education is about as logical as eliminating driver education because the speed limit changed—it’s nonsensical, because the two are not directly related.

How to Serve High-Achieving Students Well with the Common Core

Rather than using the Common Core as an excuse to eliminate services for high-ability students, superintendents and principals (and the school boards to which they report) should emphasize the importance of advanced achievement in their policies and actions. They should be aware of how their gifted students are (or are not) performing, knowledgeable about the available interventions to promote high levels of achievement, and prepared to incorporate that information in their instructional planning and professional development efforts. I witnessed a superintendent walk into a district leadership retreat, distribute data on students by performance level, and ask, “Why are our smartest students stagnating, and what can we do about it?” From that point forward, these data were shared during the district’s planning efforts, in large part because the superintendent emphasized their importance. Given the lack of focus on high-achieving students in federal and state policy, leadership on these issues at the local level becomes critical.

Interviewees stressed two main strategies for implementing the Common Core with gifted students. The first is to help teachers meaningfully differentiate instruction—which is easier said than done. The second is to continue providing gifted children access to opportunities for grade acceleration, cluster grouping, gifted-and-talented classes, and other special programming. A Common Core-based curriculum, in and of itself, will not provide all the intellectual challenges and opportunities that most high-ability students need. But if properly implemented—and supplemented—it can certainly do them some good. Let’s explore how.

Making Differentiation Real

It is not surprising that experts on curriculum designed for gifted students typically recommend a heavy emphasis on differentiation of Common Core-based instruction. As Joyce VanTassel-Baska explains, “Although the CCSS provide the framework for the learning experiences for all students, gifted educators need focused training that is content-specific for differentiating the standards.... To differentiate effectively for gifted and high-potential learners, all educators need to develop expertise at designing learning experiences and assessments that are conceptually advanced, challenging, and complex.” In a similar vein, other experts remark that “differentiating the CCSSM is essential not only to develop the knowledge and skills of learners who are mathematically talented but also to develop their passion for math.”

Fortunately, high-quality resources already exist to help educators adapt the Core for gifted students in English language arts and mathematics. For example, consider...
a sample lesson in an exemplary teacher’s guide that discusses how weather affects the global environment.\textsuperscript{17} The lesson provides readings, activities, and assessment strategies for typical learners, then provides extensive notes on how the objectives can be modified for advanced learners using a different, more challenging set of readings and activities. In addition, the notes contain guidance on classroom implementation, differentiation, and assessment.

Another teacher's guide likewise includes sample lessons that help teachers differentiate instruction for high-ability math students. For example, a seventh-grade lesson on statistical probability explains how sampling impacts inferences on a population.\textsuperscript{18} Students participate in an activity that simulates scientists randomly tagging trout and releasing them back into the water. Later, students are tasked to help the scientists estimate the trout population based on drawing samples of the fish from the water. Although much of the activity is similar for typical and advanced students, the latter are asked to complete additional activities and take different formative and pre-assessments. The lesson also contains extensive notes on implementation, including how a teacher can manage the differentiated activities of typical and gifted students in the same classroom.

A third prominent resource, although not specifically addressing the needs of gifted students, provides detailed guidelines on how lessons can be modified to address Common Core standards while fostering student creativity.\textsuperscript{19} Further, the resource books from the National Association for Gifted Children (NAGC) are full of Core-specific lesson plans.

As promising as these resources and strategies may be, many experts question whether ability-based differentiation is a reasonable and achievable goal, given the current landscape of teacher preparation and professional development. In the words of one policy expert, “We can guess what educators will do for gifted students in the future based on what they did in the past. That was minimal.” He noted that expecting teachers—who already perceive themselves as having little time to devote to differentiating for high-ability students—to somehow find more time in the CCSS context is “implausible.” Empirical research also casts doubt on whether educators can effectively differentiate based on student ability,\textsuperscript{20} especially since survey data suggest that many teachers pay less attention to high-achieving students than struggling ones.\textsuperscript{21}

There are steps educators can take to address both the need for more ability-based differentiation and the fact that teachers struggle to differentiate for high-ability students. First, the standard few hours (at most) of annual professional development spent on educating gifted students is not sufficient. Districts should devote more time to curricular and instructional differentiation by ability level in order to facilitate flexible implementation of the Common Core. We clearly can and should invest more time on this front, particularly because this training will yield benefits for all teachers and students. As indicated, teachers should also have access to the extensive and growing pool of high-quality resources on implementing the Core with high-ability children.\textsuperscript{22} Second, we should increase teachers’ team-planning time devoted to meeting the needs of gifted students. It is pointless to increase professional development time without also increasing time for teachers to discuss and collaborate on strategies to improve instructional differentiation for high-ability students.

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Yet in the end, there are two major hurdles to effective differentiation. First is the aversion to ability grouping—yet without it, differentiation is more difficult because the range of ability levels in a given class increases. Second is the strong social justice mindset of many teachers, which can lead to the belief that all students should be treated similarly.\textsuperscript{23} We can’t have it both ways: One can believe either that students shouldn’t be grouped by ability because all children should receive the same instruction in the interest of “fairness,” or that children should be grouped by ability in order to facilitate differentiation effectively. Educators of gifted students have an important role to play in the implementation of the Common Core, given their extensive experience customizing teaching by ability
level. They can help their colleagues better differentiate curriculum and instruction, serving as key resources for their districts and schools.

**Differentiation is Not Enough**

Many districts and schools have formal or informal policies that limit the learning of advanced students. Some of these rules and practices are inadvertent. For example, some districts added prohibitions on ability grouping in the early 1990s that technically also prohibit cluster grouping (essentially *within-class* ability grouping) today. Yet cluster grouping can be a helpful differentiation aid for teachers. Other policies, however, are quite intentional, such as those that cap how far students can progress within the curriculum in one school year—presumably to make differentiation easier on teachers—or basing kindergarten entrance on age and not readiness. These anti-excellence policies are often enshrined in state education laws and regulations.

Whether or not such policies are well intended—and almost all of them are—they’re nearly always bad for high-ability children. Restricting the age of entering kindergarteners, limiting how far students are allowed to progress in a given school year, and cluster grouping all serve to homogenize classrooms, making differentiation needless. But other policies and practices—such as restrictions on ability grouping and acceleration—almost certainly serve to make differentiation more difficult by increasing the range of academic ability in any one classroom. The existence of these opposing policies reflects the haphazard nature of gifted education today, in which little thought is given to the collective impact of policy and practice on high-achieving students. Regardless of the cause, these slapdash policies constrain educators seeking to do right by high-ability students. They must be removed if the new standards are to be successfully implemented.

The Common Core State Standards serve as a foundation to meet each student’s academic needs. They are not intended to limit any child’s achievement. Because they are carefully constructed to represent grade-level expectations across several grades, they can be a useful and highly effective framework to guide instruction for high-ability students. Recent resources meant to guide Common Core implementation for gifted students also provide dozens of examples of how differentiation for advanced learners is possible.

**Conclusion**

The vast majority of states remain committed to implementing the Common Core State Standards. Given that the standards are likely to form the framework of American education for years to come, they should serve as the basis for efforts to meet the needs of advanced students. And they should help lift more kids into those ranks by emphasizing the need to focus on the advanced achievement of all students.

American education is in the midst of a generations-long transition from age-based and one-size-fits-all education to highly individualized and differentiated learning—an approach that addresses students’ unique needs and development. The Common Core State Standards are another milestone on this journey. They provide an articulated framework of expectations for grade-level learning, which could help facilitate many forms of academic acceleration—such as subject-specific acceleration—that depend on clear expectations of what students should know at specific grade levels. When coupled with advances in technology, the standards could serve as a framework for supporting this long-term, critical evolution in how we help our children learn.

Educators of high-ability students have an important role to play in ensuring this journey is successful. Some of the widely noted Achilles’ heels of the framework—the need for additional development work to build on the Common Core, the reliance on ability-based differentiation, and the tendency for people to equate the standards with advanced education—are areas in which educators of the gifted have special, highly desirable skill sets. Moreover, we can build on the solid foundation
that the Common Core provides by providing high-quality resources that expand and strengthen the CCSS, ridding ourselves of anti-excellence policies, helping our colleagues differentiate more effectively, and emphasizing the need for challenging curriculum, instruction, and assessment for all students. In this way, we can propel our most able students to new heights.

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Endnotes


3 National Center for Education Statistics, “Trends in International Mathematics and Science Study,” Figure 2, 2011,

4 Jonathan Plucker et al., Talent on the Sidelines: Excellence Gaps and America’s Persistent Talent Underclass (Storrs, CT: University of Connecticut, Center for Policy Analysis, 2013); see also Figure 1.


9 These reports match my personal experiences talking to parents and educators around the country. After a recent conference session on the Common Core, many of the attendees shared concerns that their districts were using the standards to justify eliminating gifted services.

10 Further, as one advocate noted, it would be hypocritical for the field of gifted education to have a knee-jerk, negative reaction to the Core, given that it has argued for higher standards, a focus on higher-order thinking skills, integration across content domains, and so on, for decades. This point is well taken, especially for high-ability students who currently have little access to specialized programming (i.e., higher standards would presumably lead to more challenging instruction).


12 Ibid.

13 A. Porter et al., “Common Core Standards: The New U.S. Intended Curriculum,” Educational Researcher 40, no. 3 (2011), 103–116; P. Cobb and K. Jackson, “Assessing the Quality of the Common Core State Standards for Mathematics,” Educational Researcher 40, no. 4 (2011), 183–185. As Porter and colleagues note, “… although at least for Grades 3–6 in mathematics, the Common Core represents less emphasis on advanced algebra and geometry than current state standards do. Perhaps that is an improvement, or perhaps not” (p. 115). Their analysis also provides evidence—unsurprising given the wide variation in previous state standards—that the CCSS are a clear improvement over some states’ previous standards, but not those of other states.


C. Hughes et al., 2014 (p. 110, Standard 4, Grade 3 in the section on Reading Informational Text). CCSS. ELA standards Literacy:Writing.3.2 and 3.7, Literacy. Speaking/Listening.3.4, and Next Generation Science Standard ESS3a.

S. Johnsen et al., 2014 (Standard 7.SP.1, although the lesson overlaps with other standards).


H. Hertberg-Davis, “Myth 7: Differentiation in the Regular Classroom is Equivalent to Gifted Programs and is Sufficient—Classroom Teachers Have the Time, the Skill, and the Will to Differentiate Adequately,” *Gifted Child Quarterly* 53, no. 4 (2009), 251–253.

For example, see Farkas et al., *High-Achieving Students in the Era of No Child Left Behind* (Washington, D.C.: Thomas B. Fordham Institute, June 2008), http://edexcellence.net/publications/high-achieving-students-in.html.

For example, see, Hughes et al., 2014; Johnsen et al., 2014; Johnsen & Sheffield, 2013; VanTassel-Baska, 2013.


One curriculum expert noted that these policies and restrictions are also the result of curriculum alignment models (e.g., alignment of standards to assessments to instruction).


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