



Agile Mind and the Charles A. Dana Center at The University of Texas at Austin, the authors of our high school programs, have valued our discussions with *Ed Reports* as their review process and methodologies have matured in response to the field. We appreciate the diligence of the review teams in examining our programs and in sharing detailed feedback. We are gratified that *Ed Reports* has evaluated our high school programs as meeting expectations in all three gateways—placing them among those they consider the best in the nation.

As an organization dedicated to continuous improvement, we routinely gather information from schools and teachers to inform our work to enhance our programs, and our Dana Center collaborators bring invaluable experience from research, study of high-yield practice, and implementation at scale. We are pleased that the reviewers recognized the results of this collaboration as meeting expectations in each of the three gateways.

High-quality curricula, fully aligned to the depth and complexity of next generation standards, are essential to help students access rigorous mathematics instruction and achieve at high levels. *Ed Reports* has played a valuable role in helping districts identify such resources. With that said, every day we learn more about factors outside the realm of mathematical content that directly impact teacher practice, and, ultimately, students' success in mathematics.

We remain concerned that, in their current form, the *Ed Reports* criteria and scoring procedures do not fully reflect these other factors. As a result, *the Ed Reports* process could overlook the promise of tools with the potential to enhance educator practice and have significant impacts on student achievement—especially for those students who have been traditionally underserved by our mathematics classrooms—while rewarding supports that lack evidence of real impact on student learning.

In service of the continuing development of resource evaluation processes, we offer two primary recommendations for future work:

- 1. Assign scores to currently unscored indicators that attend to important non-domainspecific areas that impact students' success in mathematics; and
- 2. Develop new indicators to recognize and reward instructional materials that attend to other important components of student learning that are emerging from current research.

Two examples of unscored indicators that should be scored

We dedicate a great deal of attention to research and development to ensure that our programs are not just admired but are usable by teachers and by students. For this reason, we are extremely gratified to have met expectations in this gateway. But, by classifying certain Gateway 3 indicators as unscored, *Ed Reports* may overlook opportunities to remind the field to attend to important aspects of mathematical identity, equity, and access. Two specific examples are below.

Indicator 3q. Materials encourage students to monitor their own progress.

Awarding points for this indicator would send a clear message about the importance of building deliberate structures to equip students to self-monitor and adjust. Our programs encourage students to monitor their own progress through the same type of real-time data reporting that enables teachers to monitor student effort and performance. Each student can access reports on his or her individual effort and performance on the *Guided practice, More practice,* and *Automatically scored* components. In most of the schools in which we serve, students use these reports to take ownership of their learning, developing a sense of capability that causes them to view themselves as mathematical learners.

Indicator 3w. Materials provide a balanced portrayal of various demographic and personal characteristics.

The impact of experiencing 4 years of rigorous high school mathematics on students' later success and life-long earnings is well documented. Research has also made clear that students' sense of belonging can have a profound effect on motivation and academic achievement, especially for underrepresented students.¹ Across our programs, we work to provide a balanced portrayal of demographic and personal characteristics to ensure that every student in the classroom sees him or herself as a doer of mathematics, reinforcing a sense of belonging to a mathematics community. We strongly encourage *Ed Reports* to award points for this indicator for high school programs, as it does for middle school programs. Not doing so may send a message that attending to diversity in the upper grades is no longer important, causing many students—especially those who have been historically underrepresented and underserved—to disengage from their high school mathematics experiences. This is a fundamental threat to equity.

Recommendations for new indicators

First, an established and expanding body of research makes clear that social-emotional development (SED) is a key component to student learning, particularly for historically underserved populations in mathematics.²³ We believe that curricula and learning resource evaluations should reflect SED's cornerstone role for students. For this reason, we recommend that *Ed Reports* gather and score evidence related to how instructional materials integrate SED in the service of students' learning mathematics.

¹ Hausmann, Schofield, & Woods, 2007; Walton & Cohen, 2007; Cheryan, Plaut, Davies, & Steele, 2009; Good, Rattan, & Dweck, 2012; Lewis, Stout, Pollock, Finkelstein, & Ito, 2016; Wilson et al., 2015.

² Mangels JA, Good C, Whiteman RC, Maniscalco B, Dweck CS. Soc Cogn Affect Neurosci. 2012 Feb;7(2):230-41.

³ West, M. R., Kraft, M. A., Finn, A. S., Martin, R., Duckworth, A. L., Gabrieli, C. F. O., & Gabrieli, J. D. E.

^{(2014).} Promise and paradox: Measuring students' non-cognitive skills and the impact of schooling. Cambridge, MA: National Center for Teacher Effectiveness, Harvard University.

Second, we are also coming to understand the potential of culturally responsive teaching in closing achievement gaps for underrepresented and underserved students.⁴ Culturally responsive teaching requires more than simply "balanced portrayals of various demographic and personal characteristics" (unscored indicator 3w); it requires that teachers have robust curriculum-embedded tools and connected professional learning to enact culturally responsive teaching as regular practice, helping every student make connections that are personally relevant and meaningful, reflective of their lived experiences. For this reason, we recommend that *Ed Reports* gather and score evidence related to how instructional materials provide these tools and supports in authentic—not surface—ways.

We and our Dana Center colleagues are excited to continue to work with all organizations concerned with the equitable improvement of student achievement in the days ahead.

⁴ Hammond, Z. (2015) Culturally Responsive Teaching and The Brain: Promoting Authentic Engagement and Rigor Among Culturally and Linguistically Diverse Students. Corwin.