

Research on High-Quality Instructional Materials and Connected Professional Development

Anderson, K. & Mira, M. E. (2017). [Alignment of Instructional Materials: Trends in State Efforts](#). Atlanta, GA: Southern Regional Education Board. Research shows that high-quality instructional materials that are aligned to state standards can reduce variability in the quality of instruction across classrooms and help boost student achievement.

Blazar, D., Heller, B., Kane, T., Polikoff, M., Staiger, D., Carrell, S., & Kurlaender, M. (2019). [Learning by the Book: Comparing Math Achievement Growth by Textbook in Six Common Core States](#). Cambridge, MA: Center for Education Policy Research, Harvard University. Can a school or district improve student achievement simply by switching to a higher-quality textbook? The question is a timely one, as thousands of school districts have been adopting new texts to align with the Common Core State Standards (CCSS). Few central office decisions have a broader impact than textbook adoptions on the work that students and teachers do every day.

Boser, U., Chingos, M., & Straus, C. (2015). [The Hidden Value of Curriculum Reform: Do States and Districts Receive the Most Bang for Their Curriculum Buck?](#) Washington, DC: Center for American Progress. Curriculum plays an important role in how students are taught, and there is a strong body of evidence that shows that putting a high-quality curriculum in the hands of teachers can have significant positive impacts on student achievement. Furthermore, curriculum reform is typically inexpensive, and some of the highest quality elementary school math curricula cost only around \$36 per student. In short, curriculum reform is a low-cost, high-return educational investment.

Chiefs for Change (2017). [Hiding in Plain Sight: Leveraging Curriculum to Improve Student Learning](#). Washington, DC. A relatively nascent but powerful body of research suggests that content-rich, standards-aligned, and high-quality curricula exert a powerful influence on student achievement. There is also early evidence that switching to a high-quality curriculum may be a more cost-effective way to raise student achievement than several other school-level interventions.

Kane, T. J. (2016). [Never judge a book by its cover—use student achievement instead](#). Washington, DC: The Brookings Institution. They say never judge a book by its cover. We need to start judging textbooks and other instructional materials using student achievement instead.

Kaufman, J. H., Thompson, L. E., & Opfer, V. D. (2016). [Creating a Coherent System to Support Instruction Aligned with State Standards: Promising Practices of the Louisiana Department of Education](#). Arlington, VA: RAND Education. The impetus for this report is new evidence that state department of education work to align instruction with standards may make a difference for teachers' practices and understanding about their state standards. Using data from the American Teacher Panel, RAND researchers found that Louisiana teachers were more likely than other teachers to consult resources that address their state standards, and they reported teaching — and thinking about teaching — in ways that differ from U.S. norms and in ways that are more aligned with Common Core State Standards (CCSS).

Lynch, K., Hill, H., Gonzalez, K., Pollard, C. (2019). [Strengthening the Research Base That Informs STEM Instructional Improvement Efforts: A Meta-Analysis](#). Cambridge, MA: Educational Evaluation and Policy Analysis, Harvard University. We present results from a meta-analysis of 95 experimental and quasi-experimental preK-12 science, technology, engineering, and mathematics (STEM) professional development and curriculum programs, seeking to understand what content, activities and formats relate to stronger student outcomes. Across rigorously conducted studies, we found an average weighted impact estimate of +0.21 standard deviations. Programs saw stronger outcomes when they helped teachers learn to use curriculum materials; focused on improving teachers' content knowledge, pedagogical content knowledge and/or understanding of how students learn; incorporated summer workshops; and included teacher meetings to troubleshoot and discuss classroom implementation.

Magee, J., & Jensen, B. (2018). [*Combining Curriculum And Teacher Professional Learning*](#). Collingwood, VIC: Learning First. This report argues that quality curriculum and teacher professional learning are not policy trade-offs. It will show how quality standards and curriculum strengthen best practice teacher professional learning based on an improvement cycle. It will also show how the improvement cycle can help to narrow the gap between the documented and implemented curriculum, helping to ensure that quality curriculum is effectively implemented and that students benefit from standards and curriculum established at the system level and maintained through to the classroom.

Polikoff, M., Dean, J. (2019). [*The Supplemental-Curriculum Bazaar: Is What's Online Any Good?*](#) Washington, DC: The Thomas Fordham Institute. Where teachers were once limited to traditional textbooks, informational texts, novels, and materials passed along by others, today the online marketplace is wide open, flush with copious about what these supplemental instructional materials actually look like and whether they are any good. Do they truly help educators deliver a high-quality curriculum?

Steiner, D. (2018). [*Curriculum Literacy In Schools Of Education? The hole at the center of American teacher preparation*](#). Collingwood, VIC: Learning First. This report argues that teachers across the United States are under-prepared to select and develop quality curriculum. It seeks to show why this situation is so damaging, and what might be done to remedy it. It surveys the current landscape of content that is actually being taught in schools, and reviews how teacher preparation programs approach the matter of content – if at all.

Steiner, D., Magee, J., & Jensen, B. (2019). [*High-quality Curriculum And System Improvement*](#). Collingwood, VIC: Learning First. This report focuses on why states and districts need to focus on curriculum as a vehicle of student success, and how that focus would contribute both to improved student learning and to equity. It sets out current approaches to curriculum development and implementation and implications for school improvement in the United States and Australia.

Steiner, D., Magee, J., & Jensen, B. (2018). [*What we teach matters: How quality curriculum improves student outcomes*](#). Collingwood, VIC: Learning First. This report defines quality curriculum and sets out the contemporary evidence on its impact on student learning, with a focus on research from the United States. It argues that developing and implementing quality curriculum is an important next step for many school systems internationally.

TNTP (2018). [*The Opportunity Myth: What Students Can Show Us About How School Is Letting Them Down-and How to Fix It*](#). New York, NY. We partnered with five diverse school systems, rural and urban, district and charter, to listen to students' views on their educational experiences and observe how those experiences played out, in real time, in their classrooms. While "student experiences" include many things within and outside school, we chose to focus on a set of in-school elements that offered a window into what students were doing in their classes and how they perceived that time. Above all, we wanted to understand students' aspirations for themselves, what kind of lives they wanted to lead, and how school was preparing them to live those lives— or letting them down.

Wiener, R. & Pimentel, S. (2017). [*Practice What You Teach: Connecting Curriculum & Professional Learning in Schools*](#). Washington, DC: The Aspen Institute. To improve teaching and advance student learning requires weaving together the curriculum that students engage with every day with the professional learning of teachers. This paper describes the research supporting this argument, profiles three examples of educators integrating curriculum with professional learning, and provides key takeaways for state, district, and school leaders.