

Rigorous K–12 Curriculum

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National and international research finds that a challenging academic curriculum is one of the most powerful levers to boost student learning and narrow achievement gaps between advantaged and disadvantaged students.¹ Recent studies suggest that switching from a low- to high-quality textbook can boost student achievement more than many other more expensive interventions, such as expanding preschool programs, decreasing class sizes, or offering merit pay to teachers.² For example, one elementary-level instructional program (Core Knowledge) produced learning gains of almost 20 percentage points on standardized reading tests in one year.³ Similarly, another large study of a secondary-school math curriculum (Core-Plus) showed its use yielded 115 additional days of student learning over another (unnamed) curriculum during a single year.⁴

New organizations such as EdReports.org evaluate the strengths of published instructional materials, and districts and states are coupling this information with high-quality professional development to put strong curricular frameworks in place. EdReports.org's rubrics include not only standards alignment but also academic rigor and the capacity of a curriculum to advance students' deeper learning skills through complex tasks, evidentiary-based writing, and application of knowledge.⁵

Louisiana's Approach

One state showing extraordinary leadership is Louisiana and to good effect. As a 2016 study illustrates, the Louisiana Department of Education (LDOE) undertook four key strategies to support teachers' understanding and use of high-quality materials and standards-aligned classroom practices:

- 1. Relentless focus on curricula.** Many states and districts recommend or even require the use of particular instructional programs. LDOE's approach is different; it recruits teachers to help the state rank English language arts and math programs according to quality.⁶ The standards for qualifying as a top-level program, known as tier 1, are high, and few programs make the cut.
- 2. Procurement strategies that incentivize the selection of high-quality materials and professional development.** LDOE backs up the rankings with dollars. It grants state contracts only to publishers whose materials meet the state's tier 1 requirements.

LDOE places additional emphasis on curricula by granting professional development contracts only to vendors who can demonstrate an alignment with tier 1 products.

- 3. A strong assessment regime.** LDOE reviews and endorses formative assessments that align with state summative tests. As a result, teachers have access to resources that cohere with one another and many districts have been able to reduce the number of required assessments.
- 4. Recruitment of teachers and districts to guide the process.** LDOE has not mandated its preferred curriculum. Rather, it positions itself as a clearinghouse that provides resources for districts and schools and encourages teachers, school leaders, and district administrators to take ownership for curriculum changes. To present a clear message and simultaneously cultivate local leadership, LDOE recruits two teacher leaders per school to vet materials, lead professional development, and communicate between districts and the state.⁷

By LDOE's current count, more than 70 percent of districts exclusively use instructional materials that meet the state's tier 1 standards, up from a mere 20 percent five years ago.⁸ Meanwhile, the following data points suggest that Louisiana's academic trajectory is improving:⁹

- Louisiana's high school graduation rates are rising appreciably. In School Year (SY) 2006–07, the state's high school graduation rate stood at 66.3 percent. By SY 2014–15, it stood at 77.5 percent.¹⁰ In SY 2015–16, the rate dipped slightly to 77 percent, but a full 43 percent of graduating students earned early college credit or some type of credential valued in industry by the end of high school.¹¹
- The state's fourth-grade students had the country's highest growth on the 2015 National Assessment of Educational Progress reading test and tied with Mississippi for the fastest state growth in math. Louisiana was among the top five states in narrowing several achievement gaps, including those between white and African American students and white and Latino students in fourth-grade math and the gaps between white and Latino students in fourth-grade reading, eighth-grade math, and eighth-grade reading.¹²

- In 2013, Louisiana became one of twelve states to require all eleventh graders to take the ACT test. In 2015, Louisiana's students gained more points in their composite ACT scores than those in the other eleven states that require all of their students to take the ACT.¹³
- The College Board announced in 2014 that Louisiana made the nation's greatest gains in the number of students scoring a 3, 4, or 5 on Advanced Placement (AP) exams, and the number of students taking AP courses more than doubled between 2012 and 2016.¹⁴

Guiding Questions

- Do state and district leaders have an appetite for supporting systemic instructional coherence?
- Is there buy-in from key legislators and/or district school board members for long-term instructional coherence?
- What are the costs of implementation, including the recruitment and funding of teacher leaders and the funding of extensive, content-based professional development?



Endnotes

- ¹ E. Erberber et al., "Socioeconomically Disadvantaged Students Who Are Academically Successful: Examining Academic Resilience Cross-Nationally," (Amsterdam: International Association for the Evaluation of Educational Achievement, 2015); Organisation for Economic Co-operation and Development, *PISA 2012 Results: Excellence Through Equity Giving Every Student the Chance to Succeed (Volume III)* (Paris: Author, 2013), <http://www.oecd-ilibrary.org/content/book/9789264201132-en>; E. D. Hirsch, *Why Knowledge Matters: Rescuing Our Children from Failed Educational Theories* (Cambridge, MA: Harvard Education Press, 2016).
- ² G. Whitehurst, "Don't Forget Curriculum," *Brown Center Letters on Education* (Washington, DC: Brookings Institution, 2009); U. Boser, M. Chingos, and C. Straus, *The Hidden Value of Curriculum Reform: Do States and Districts Receive the Most Bang for Their Curriculum Buck?* (Washington, DC: Center for American Progress, 2015), <https://cdn.americanprogress.org/wp-content/uploads/2015/10/06111518/CurriculumMatters-report.pdf>; M. Polikoff, "Textbooks Are Important, but States and Districts Aren't Systematically Tracking Them," *Brown Center Chalkboard* (blog), Brookings Institution, March 15, 2016, <https://www.brookings.edu/blog/brown-center-chalkboard/2016/03/15/textbooks-are-important-but-states-and-districts-arent-systematically-tracking-them/>; T. Kane et al., *Teaching Higher: Educators' Perspectives on Common Core Implementation* (Cambridge, MA: Center for Education Policy Research, Harvard University, 2016).
- ³ For a full discussion, see D. Steiner, *Curriculum Research: What We Know and Where We Need to Go*, (Baltimore, MD: Johns Hopkins University, 2017).
- ⁴ R. E. Slavin, C. Lake, and C. Groff, "Effective Programs in Middle and High School Mathematics: A Best Evidence Synthesis" (Baltimore, MD: Johns Hopkins University, Center for Data-Driven Reform in Education, 2008).
- ⁵ EdReports.org, "3–8 ELA Methodology," <http://www.edreports.org/about/our-approach/ela-3-8.html> (accessed August 9, 2017); ———, "High School Math," <http://www.edreports.org/about/our-approach/high-school-math.html> (accessed August 9, 2017).
- ⁶ LDOE established three levels for classifying curricular resources: tier 1 ("exemplifies quality"), tier 2 ("approaching quality"), and tier 3 ("not representing quality").
- ⁷ J. Kaufman, L. Thompson, and V. D. Opfer, *Creating a Coherent System to Support Instruction Aligned with State Standards: Promising Practices of the Louisiana Department of Education* (Arlington, VA: Rand Corporation, 2016), http://www.rand.org/content/dam/rand/pubs/research_reports/RR1600/RR1613/RAND_RR1613.pdf.
- ⁸ Johns Hopkins Institute for Education Policy, "High-Quality Curricula and Student Success," D. Steiner in conversation with T. Kane, R. Kockler, and M. Chingos" (Roosevelt House Public Policy Institute, New York, NY, September 14, 2016).
- ⁹ Research has not established a causal link between Louisiana's instructional reforms and student success. Other factors, including teachers' pre-reform practices, additional LDOE practices, and statewide demographic and economic variability, may correlate with teachers' increased knowledge and capacities.
- ¹⁰ LDOE, "High School Graduation Rate Vaults to All-Time High," news release, May 2, 2016, <https://www.louisianabelieves.com/newsroom/news-releases/2016/05/02/high-school-graduation-rate-vaults-to-all-time-high>.
- ¹¹ K. McGill, "77 Percent High School Graduation Rate in Louisiana for 2016," *US News & World Report*, June 23, 2017.
- ¹² U.S. Department of Education, "The Nation's Report Card: 2015 Mathematics & Reading Assessments," https://www.nationsreportcard.gov/reading_math_2015/#?grade=4 (accessed July 13, 2017).
- ¹³ LDOE, "Report: Louisiana Is Number One State in Annual ACT Gain," news release, August 26, 2015, <https://www.louisianabelieves.com/newsroom/news-releases/2015/08/26/report-louisiana-is-number-one-state-in-annual-act-gain>.
- ¹⁴ ———, "Louisiana Students Achieve Top Advanced Placement Gains in State History," news release, July 31, 2014, <https://www.louisianabelieves.com/newsroom/news-releases/2014/07/31/louisiana-students-achieve-top-advanced-placement-gains-in-state-history>.

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