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The Promise of Curriculum: Recent Research on Louisiana’s Instructional Reforms
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Introduction
American policymakers seldom view the curriculum\(^1\) as a serious lever for change. This is unfortunate, since national and international research finds that a challenging curriculum contributes to student learning and narrows the achievement gaps between advantaged and disadvantaged students. I examine the research record in depth in *Pluralism and American Public Education: No One Way to School* (released next week by Palgrave MacMillan), but here are a few examples.

- **International Baccalaureate** in Chicago. In 1997, Chicago Public Schools introduced the International Baccalaureate Program (“IB”) and a pre-IB program into 13 low-performing public high schools. A study that matched students who enrolled in the four-year program with peers who did not found that the IB students were 40% more likely to attend a four-year college, 50% more likely to attend a selective college, and significantly more likely to persist through college than their peers. Why? The research team notes that the rigorous four-year program had enabled students to develop a “strong academic identity” and to understand the “need for an academic community.” Research undertaken by the U.S. Department of education confirms this finding: “The intensity and quality of one’s

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\(^1\) The curriculum is sometimes defined in terms of its scope and sequence, as in, “the systematic study of language and literature, science and mathematics, history, the arts, and foreign languages” (Ravitch 2001). The curriculum in this sense is about content rather than skills. An example would be the International Baccalaureate Diploma Program, which specifies a rigorous course of study across all subjects for all students.

“Curriculum” also refers to “the instructional materials used to teach, including teachers’ guides and textbooks.” In the Common Core era, materials are deemed “high-quality” when they align with rigorous standards and when their use is likely to improve academic outcomes (Boser, Chingos, and Straus 2015). Examples include Expeditionary Learning and EurekaMath (“Math Reports: Compare K-8 Math Materials” undated); (“ELA Reports: Compare K-8 ELA Materials” undated).

I use “curriculum” here to indicate both the course of study and also the instructional materials used in the classroom. While the relationship between them is not precise, we know strong curricula and high-quality instructional materials are mutually reinforcing (see Reys et al. in Bjorklund-Young 2016).
secondary school curriculum’ is the strongest influence not only on students’ college access but also of college completion (Coca and Consortium on Chicago School Research 2012).”

- Catholic high schools in the United States. James Coleman’s study of American high schools concluded that Catholic high schools narrowed the gap between advantaged and disadvantaged children so substantially that, by the end of high school, student results were nearly “homogeneous” – in marked contrast to district high schools (Coleman, Hoffer, and Kilgore 1982). Anthony Bryk, Valerie Lee, and Peter Holland followed up with an analysis of how Catholic high schools narrowed the gaps so effectively. They identified a “common, constrained, challenging academic curriculum” and a strong normative culture as the two causal factors (Bryk, Lee, and Holland 1993).

- International analyses. The OECD’s report on excellence and equity across its 38 member- and 31 partner-nations notes that the most equitable countries expose all students, not merely those deemed “gifted,” to high-level mathematics (Secretary-General of the OECD 2014). The International Association for the Evaluation of Educational Achievement (IEA) concurs; its cross-national analysis of socioeconomically disadvantaged students found that a critical in-school factor in low-income students’ success was “an environment of high academic achievement” (IEA 2015).

- High-quality instructional materials. Recent studies suggest that switching from a low- to a high-quality textbook can boost student achievement more than other, more popular interventions such as expanding preschool programs, decreasing class sizes, or offering merit pay to teachers. It is also more cost-effective (Whitehurst 2009); (Boser, Chingos, and Straus 2015); (Polikoff 2016); (Kane 2016); (Bjorklund-Young 2016).

Most democracies require all schools to teach a common body of knowledge to all students (West 2012); (Berner 2012). England, Finland, Singapore, and Israel, for instance, have robust national curricula; Germany has provincial ones. The Netherlands, which funds 36 different kinds of schools, requires all of them to teach the same content. The quality of a national curriculum may deteriorate or improve over time, of course. E.D. Hirsch places France in the former category (Hirsch 2016); Alberta, Canada, fits in the latter. Alberta’s provincial curriculum had deteriorated across the 20th century such that by the 1970s, high schools required only two subjects for graduation - social studies and English (Heyking 2006). In the 1990s, the government changed course (as a result of concerted efforts from parents and civic organizations) and established a sequenced curriculum that all schools had to follow (McEwen 1995); (Campbell 2004).2 Alberta is now among the world’s most equitable and high-performing school systems (Secretary-General of the OECD 2014).

Why are Americans so coy about curriculum? There are many reasons. A hundred years ago, schools of education turned from academic subject mastery to developmental psychology as the foundational resource for teacher preparation. In this now-dominant view, requiring students to learn a specific

2 I explore Alberta’s history in depth in Pluralism and American Public Education: No One Way to School (2016).
sequence within a particular subject is pedagogically suspect (Ravitch 2001); (Steiner 2005); (Hirsch 2006); (Hirsch 2016).

The bid for a coherent curriculum also courts controversy over which interpretive framework should be used. As one scholar put it, “We may all accede to the proposition that students should be presented with a realistic view of American history, but my realism may be your panegyric and another’s denunciation” – as conflicts over various science and humanities curricula indicate (Bruner 1978); (Blum 1996); (Sewall 1996); (Fullinwider 1996).

Another factor: our school systems place a high premium upon local control and teacher autonomy. For many district superintendents, prescribing a curriculum feels like an abrogation of teachers’ judgment. The New York City Department of Education, for instance, tracks the district’s procurement data but not which materials are being used in which schools, or to what effect (Sahm 2015). The libertarian fear of governmental overreach also bolsters local control and, in its own way, resists prescribed standards or curricula. Animus against the Common Core State Standards can be attributed, at least in part, to this source (Wood 2011).

And so the curriculum rarely rises to the level of action.3 Massachusetts is an exception: the Massachusetts Education Reform Act of 1993 required the creation of coherent, intellectually challenging curricular frameworks. The state then created an entire system around curriculum that influenced teacher preparation, professional development, assessments, and student learning. The State Board of Education asked university professors to establish the college-ready contours of each subject, and then back-mapped K-12 grade-level frameworks with the end in mind (Roselli 2005). The Board focused professional development on content and added new academic examinations to the teacher certification process (Reed 1998); (Stotsky 2015). In the wake of these changes, Massachusetts rose to the top of the national academic charts (Peterson et al. 2011). No other state has come close to Massachusetts’ systemic approach to the curriculum.4

The adoption by 42 states of the Common Core State Standards (Common Core), or a version derived from them, offers states a new opportunity to focus on curriculum. The Common Core State Standards are not a subject-by-subject course of study such as we find in Alberta and Massachusetts, but they do enable states to link high standards, classroom instruction, and assessments through systemic "standards-alignment." States could, in other words, leverage the standards to re-orient K-12 towards a strong curriculum. To what extent are they doing so?

There are many ways to investigate this question. One is to examine the perceptions and practices of teachers in states that have adopted the standards and ask, Have these teachers come to understand what the standards require? Are they using higher-quality materials? Have they adjusted their instructional practices in any way? An interesting study by the RAND Corporation that was released in Spring 2016 found significant variability amongst nationally representative samples of

3 For a recent exception, see No Time to Lose: How to Build a World-Class Education System State by State, a report from the National Conference of State Legislators (National Conference of State Legislators 2016).
4 This is not to suggest that Massachusetts’ student achievement has equally benefited all students. Persistent learning gaps remain, as is evident in the Lawrence receivership model (Borkoski 2016); (Schueler 2016).
teachers, with many teachers not yet cognizant of the instructional shifts required by the standards nor reliant upon the strongest instructional programs available (Opfer, Kaufman, and Thompson 2016). There was, however, a surprise finding in the national analysis: Louisiana’s teachers demonstrated a significantly stronger grasp and use of standards-aligned materials and practices than their peers elsewhere. The question was, why?

What makes the difference in teacher practices particularly interesting is the recent rise in Louisiana’s student achievement:

- The state’s 4th-grade students had the country’s highest growth on the 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: the white-black gap in 4th-grade math, the white-Hispanic gap in 4th grade math and reading; the white-Hispanic gap in 8th grade math and reading (“NAEP 2015: Mathematics and Reading Assessments” 2015).

- In 2013, Louisiana became one of 12 states to require all juniors to take the ACT test. In 2015, Louisiana’s students gained more points in their composite ACT scores than those in the other 11 states that required 100% participation (“Louisiana Is Number One State in ACT Gain” 2015).

- The College Board announced in 2014 that Louisiana had made the country’s greatest gains in the number of students scoring a 3, 4, or 5 on AP exams, and the number of students taking AP courses more than doubled between 2012 and 2016 (“Louisiana Students Achieve Top Advanced Placement Gains in State History” 2014).

The combination of Louisiana teachers’ distinctive responses and the state’s rising student achievement prompted RAND’s research team to press further. Was there a connection between these two phenomena and how the Louisiana Department of Education had leveraged the standards?

Creating a Coherent System to Support Instruction Aligned with State Standards: Promising Practices of the Louisiana Department of Education is the result (Kaufman, Thompson, and Opfer 2016). Kaufman et al.’s analysis of differences between Louisiana’s teachers and their peers concludes that policies enacted by the Louisiana Department of Education (LDOE) have placed curriculum at the center of a locally controlled, educator-led, instructional program.

Creating a Coherent System: Methodology and Findings
The RAND’s reports refer to Common Core states and states whose standards mirror the Common Core as SACC, for standards adapted from Common Core. To assess the extent to which teachers in SACC states have changed their teaching practices to align with the new standards, Kaufman et al. analyzed two data sets from the American Teacher Panel (ATP), a randomly selected panel of K-

5 All points cited in Kaufman et al.’s report and independently verified as noted.
12 public school teachers designed by the RAND Corporation. The first questionnaire (June 2015) focused on the instructional materials teachers used, their cognizance of state standards in classroom instruction, and their students’ standards-aligned practices. The second questionnaire (October 2015) focused exclusively on math and ELA teachers’ use of instructional materials. Creating a Coherent System is based exclusively upon the responses of teachers who answered both questionnaires. These results indicated “large and intriguing differences between surveyed teachers from states that have adopted [Common Core] and those in one particular state: Louisiana. Specifically, Louisiana teachers are using more instructional materials aligned with Common Core, and they report thinking and teaching in ways that are more in line with the tenets of Common Core” (2-3). A side note: Louisiana adopted the Common Core in 2010 and, after review in 2015-16, published its own Louisiana Student Standards in English Language Arts and math. The state’s current academic standards in science, social studies, and foreign language will be reviewed in the coming years (“Louisiana Academic Standards,” n.d.).

The differences between Louisiana teachers and their peers in other SACC states prompted the qualitative study. Here, the question of interest was “to identify state policies and practices in Louisiana that could be supporting teachers’ work” so as to “provide guidance to states about sensible state systems that give educators coherent messages and concrete tools to help students meet high standards” (3). To this end, the research team interviewed five senior members of the Louisiana Department of Education (LDOE) and reviewed public documents and resources produced by the LDOE – thus creating a second set of findings.7

The analysis required, finally, that the research team distinguish between materials that were actually aligned with standards and those that merely claimed to be so (Polikoff 2016). Here, they relied upon publications from EdReports, a non-profit organization that evaluates the coherence, rigor, and standards-alignment of commonly used materials. EdReports’ work formed the basis on which Kaufman et al. interpreted teacher responses.

Quantitative Findings

The questionnaires found that compared to teachers in other SACC states, Louisiana’s teachers use standards-aligned materials more frequently, understand the standards better, and are more likely to implement aligned classroom practices.

- More likely to use aligned materials. Differences in teachers’ use of standards-aligned materials are not trivial. EngageNY is one of the nation’s most closely aligned instructional programs,

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6 To derive the ATP, the RAND Corporation identified 2,300 schools that are nationally representative in terms of grade span (elementary, middle, high school), school size, student income status determined by eligibility for Free or Reduced Price Lunch, population density, and geographic region. Once the schools were identified, RAND used probability-sampling methods to select two full-time teachers who reflect national norms for years of experience, subject area, and grade level (RAND Corporation 2016a). The ATP also includes state-representative samples from California, Louisiana, New Mexico, and New York. The panelists complete three or four 30-minute, web-based questionnaires per year. They receive a small financial incentive to participate (RAND Corporation 2016b).

7 The interviews occurred in Spring 2016.
having been designed by New York State with Race to the Top funding.\footnote{The Johns Hopkins Institute for Education Policy’s Executive Director, David Steiner, was the only commissioner to include funding for instructional materials in the Race to the Top proposal. EngageNY is the result.} Fully 72% of Louisiana’s math teachers report using EngageNY or Eureka Math compared to 36% of their peers elsewhere. This is significant, since EngageNY uses a version of Eureka Math that is, along with Bridges in Mathematics, the only curriculum aligned with the Common Core across all grades, according to EdReports (5).

- \textbf{More likely to understand the pedagogical shifts required by the standards.} Louisiana’s ELA teachers are significantly more prepared to identify practices and texts aligned with the standards and, just as important, those that were not aligned.
  
  - The Common Core views texts as tools by which to learn reading skills, rather than the other way around, i.e., reading skills as an abstract exercise. In answer to the question of whether teachers should “focus on reading skills first and then organize teaching around them so that students will apply these skills to any text,” 75% of SACC teachers agree, but only 49% of Louisiana’s teachers do so. Another standards-aligned shift is to bring challenging texts to all the students, not merely those who are deemed “advanced.”
  - Conversely, 49% of Louisiana’s teachers but only 21% of SACC teachers agree that one should “teach particular texts that students should read and then organize instruction around them, teaching reading skills as tools to understand texts” (8).

In math, Louisiana’s K-5 teachers are more likely than their peers (57% to 36%) to identify “correct standards and nothing else.” This differential does not hold in grades 6-8, for which teachers in all states have only a 22% accuracy rate (9).

- \textbf{More likely to implement aligned practices in the classroom.} Louisiana’s teachers carry their knowledge into the classroom. The ATP found that ELA teachers from Louisiana are 15-16% more likely than other teachers to report that their students refer to textual evidence, analyze the structures of texts, and employ conventional grammar and syntax when writing and speaking (10). Louisiana’s elementary ELA teachers are also more likely to require all students to read challenging texts rather than to calibrate assignments to students’ perceived “level” by a margin of 60% to 44% (in-class readings) and 54% to 27% (out-of-class readings) (11).

The math findings differ according to students’ ages: there are no statistical differences between elementary-school teachers, but in secondary school, “nearly 90% of secondary math teachers in Louisiana reported that they ask students to explain and justify their work and ask students to use math symbols and language appropriately on a daily basis, compared with only about 60% of teachers in other SACC states (11).”
Taken together, an analysis of both questionnaires indicates that Louisiana’s ELA and math teachers understand and implement standards-aligned standards and practices more consistently than their peers in other SACC states. Why?

Qualitative Findings
To investigate whether the activity of the Department of Education had influenced Louisiana teachers’ stronger grasp of standards and aligned practices, Kaufman et al. interviewed senior members of the LDOE and reviewed related documents and presentations the Department had published. The research team limited its scope to strategies implemented since Superintendent John White’s tenure, which began in January 2012.

They identified several strategies the LDOE used to support a standards-aligned system, including:

- **Relentless focus on curricula.** Many states and districts recommend or even require the use of particular instructional programs. The LDOE goes further, ranking ELA and math programs according to quality. The standards for Tier 1 inclusion are high, and few make the cut. In math, those that did include Eureka Math K-11, College Board Springboard Math 9-11, Math Learning Center K-5, and Zearn1-4. In ELA, the LDOE initially approved only 2 programs (Core Knowledge K-3; Houghton Mifflin Harcourt 9-12) (12).

  The LDOE backs up the rankings with dollars: it grants state contracts only to Tier 1 publishers. This, too, has come with a price. “In the words of a state official, ‘It’s not pleasant when you give big publishers Tier 3 ratings and they have big lobbies and bring in millions of dollars...It would have been easy to let it go’” (12). The LDOE places additional emphasis on curricula by granting professional development contracts only to vendors who can demonstrate an alignment with Tier 1 products. Here, the research team observed, “While most states do provide professional development opportunities to K-12 teachers, we have not found other clear examples of state department of education work to make connections between specific professional vendors and curricula or to investigate the quality of these vendors in such a variety of ways” (13).

  Finally, the LDOE reviews and endorses formative assessments that align with state summative tests. The result is that teachers have access to resources that cohere with one another and with the state’s academic goals.

- **Recruitment of teachers and districts to guide the process.** The LDOE claims not to have abrogated local control. It positions itself as a clearinghouse that provides resources for districts and schools, rather than as an educational Central Command. One official stated, “A lot of our work has been about How do you create governance structures over reforms that are not owned by reformers and bureaucrats but are owned by real people in communities?” To present a clear message and to simultaneously cultivate local leadership, the LDOE recruits two Teacher Leaders per

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9 Tier 1 (“exemplifies quality”), Tier 2 (“approaching quality”), and Tier 3 (“not representing quality”).
school to vet materials, lead professional development, and communicate between districts and the state (16).

In the qualitative analysis, Kaufman et al. found that, at least from the Departmental view, Louisiana has begun to institute a coherent academic system and to back it up with consistent communication and distributed leadership. The research team quoted one state official as saying that the LDOE’s goal is to “create the conditions in which a teacher is able to say, ‘I’m motivated to achieve with my kids, and every incentive I have in my professional life leads me there. I know what it looks like, I can quantify it, and I understand how all the tools I have at my disposal play a role in getting me there” (16). Rebecca Kockler, the Assistant Superintendent of Academic Content for the LDOE, put it this way at an event hosted by the Johns Hopkins Institute for Education Policy in September 2016: “We make the best choice, the easy choice.” By the LDOE’s current count, more than 70% of districts use aligned materials exclusively – up from a mere 20% five years ago (High-Quality Curricula and Student Success: David Steiner in Conversation with Thomas Kane, Rebecca Kockler, and Matthew Chingos 2016).

Summary and Limitations
The RAND’s study suggests that the Louisiana Department of Education’s instructional infrastructure makes coherence and high quality possible. The study nevertheless leaves open several questions that warrant additional investigation.

First, as the researchers note, we cannot tell if the state’s actions are contributing to Louisiana teachers’ instructional practices and thence to students’ rapidly rising achievement - although the team noted that such growth is “likely due in part to changes teachers are making to their instruction.” To establish causation, however, they would first need to establish that teachers’ understanding and use of the standards do improve student achievement, then to isolate the LDOE’s new instructional systems from other factors correlated with teachers’ increased knowledge and capacities. These factors might include ancillary LDOE policies, statewide demographic shifts, economic variability, changes in school sector enrollments (e.g., from district to charter), or improvements in teacher training programs. Any of these changes might have contributed to Louisiana teachers’ knowledge base and to rising student achievement. Research would also need to investigate teachers’ practices and perceptions pre-2012 for continuity and discontinuity.

On the qualitative side, the project did not include interviews in schools or districts and thus could not confirm state-department officials’ accounts. As the researchers note, the LDOE’s perception of a singular focus has not been validated on the ground independently of the questionnaire responses. A qualitative study of local perspectives would be important.

Finally, Creating Coherence was a relative exercise, not an absolute one. While the LDOE’s work seems to have prompted classroom instruction that looks quantitatively different from national averages, we do not know how Louisiana’s Tier 1 materials and classroom instruction hold up internationally. How does EngageNY or Louisiana’s own ELA curriculum compare to the elementary and secondary curricula in Australia, the Netherlands, and Alberta? Is EurekaMath on par with Singapore Math? Might there be even larger gains from syllabi that supports exit exams such as the Cambridge
International O-Levels Mathematics (“Cambridge O-Level Mathematics D” 2016)? Is the support that teachers receive from the LDOE equal to that provided in Hong Kong? Understanding these differentials could help states calibrate their own efforts.

Policy Implications
Although research indicates that a strong curriculum benefits all students and particularly disadvantaged students, the culture and politics of education are such that few policymakers consider the curriculum an important lever for change.

One policy option in this milieu is to champion domain-based assessments that focus on areas of history (the Ming Dynasty) or literature (English Romanticism), rather than on prescribed texts, the selection of which would inevitably create political controversy (Steiner 2014). Creating A Coherent System, however, suggests a different way forward for state departments of education which, after all, are responsible for the majority of students in this country. The Louisiana Department of Education has used the standards to create a system with the curriculum at its core.

The participatory nature of Louisiana’s instructional reforms is perhaps the secret to its success. Laws and regulations cannot really change the culture of schooling; only teachers and principals can do that, and only over a long period of time (Finnigan and Daly 2014). The LDOE has made change at the level of culture more likely by its consistent message, deference to local control, and reliance upon teacher leadership from the beginning to the end. The LDOE sets a high bar, and invites teachers to help them reach it. Louisiana’s system is participatory in a second way: all schools are welcome. In providing guidance and professional development to dioceses, Jewish day schools, and charter schools alongside district schools, the LDOE is signaling that, as far as instruction goes, all of the children in Louisiana matter—no matter where they enroll.

Louisiana’s efforts are particularly instructive in the era of ESSA, the Title I provisions of which enable states to bring stronger instructional materials into chronically underperforming schools (§200.21) and into schools with chronically underperforming students (§200.22). Commissioners who hesitated to institute statewide instructional systems could instead use Title I funds to elevate instructional rigor in the communities that have the most to gain.10

Citations

10 Kaufman et al.’s study is, for me, quite personal. In the mid-1990s, I taught American History and Western Civilization at a university in rural Louisiana. My students were engaged and eager to learn, and I adored them. However, they showed me, in heartbreaking detail, the painful inadequacies of Louisiana’s elementary and secondary education at that time. Precious few of my students knew when the American Civil War had occurred or why; had heard of the Holocaust; could locate China, Japan, Canada, or Mexico on the globe; had read a sonnet. Many struggled to write with complete sentences. There was nothing whatsoever wrong with their minds. Rather, Louisiana’s classrooms had unwittingly shrunk their worlds and limited their life prospects. It hits me with particular force that, twenty years later, Louisiana seems committed to changing the academic experiences and therefore the life trajectories of the next generation, for the better.


http://www.brookings.edu/blogs/brown-center-chalkboard/posts/2016/03/15-textbook-data-student-achievement-polikoff/rssid=brown&utm_source=feedblitz&utm_medium=FeedBlitzRss&utm_campaign=FeedBlitzRss&utm_content=Textbooks+are+important%2c+but+states+and+districts+aren’t+systematically+tracking+them.


http://education.jhu.edu/edpolicy/commentary/athirdway.


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