



The Hidden Value of Curriculum Reform

Do States and Districts Receive the Most Bang for Their Curriculum Buck?

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Introduction and summary

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.¹ In short, curriculum reform is a low-cost, high-return educational investment.

To promote curriculum reform—and make better use of education dollars—this report provides new insight on how curricula are selected in every state across the country and examines the costs of those curricula. Throughout this report, the authors use “curriculum” to refer to the instructional materials such as textbooks, workbooks, and software used by teachers. In compiling this report, the authors conducted extensive research—including interviews with state and district officials, along with an examination of curricula price lists—which provides a detailed picture of how public schools could increase the return on investment, or ROI, of taxpayer dollars.

The report’s key findings include:

- **Higher-quality curriculum in elementary school math can come at a relatively low cost.** The authors analyzed six pairs of curricula, where each pair included a lower-quality and higher-quality version. The authors looked at how much it would cost for a school to switch from a lower-quality product to a higher-quality one in elementary school math and found there’s not much of a cost. In fact, the data that the authors collected from 19 states indicate that publishers tend to charge all states roughly the same price.² These findings mean that nearly all opportunities for boosting ROI are a matter of choosing the best product, not finding a better price.
- **More rigorous elementary school math curricula can deliver far more ROI than other reforms.** In compiling this report, the authors compared the cost-effectiveness ratio for each of six pairs of elementary math curricula that had been subject to a rigorous evaluation sponsored by the U.S. Department of Education.

Reviewing these data in light of an influential study by economist Doug Harris, the authors determined that switching to a higher quality curriculum has a huge ROI relative to other educational policies—in large part because curricula cost so little. There are other factors at play, of course, and gains in math, for instance, can be easier to achieve relative to other subjects. But what's clear is that the average cost-effectiveness ratio of switching curriculum was almost 40 times that of class-size reduction in a well-known randomized experiment.

- **When it comes to math curricula in the early grades, cost does not always equal quality.** There is little relationship between the cost and quality of instructional products. Prices do not vary widely across products, with the most expensive product in the same government-sponsored study costing only \$13 per student more than the least expensive product. If anything, the higher-quality products tend to cost less, and in some instances, the most expensive curriculum was among the least effective and the least expensive was among the most effective.
- **Policy decisions do not consider rigorous measures of curricula quality.** State adoption decisions are often based on limited assessments of quality and weak proxies for alignment to state standards.³ Furthermore, politics often dominate the discussion over the adoption of textbooks and other instructional material, and issues such as the teaching of evolution are often center stage. There is also a clear gap between the reality of which curricula are effective or aligned to state standards and the curricula that publishers advertise as such.

Many states are moving forward with implementing the new Common Core standards, and this process offers important opportunities for the creation of innovative, cost-effective instructional products. However, these new products will not add much value if schools cannot accurately separate the wheat from the chaff.

Thus, the authors recommend the following:

- **Invest in better product research.** It is hard for observers to judge curricula quality if there is little evaluation of most products' effectiveness. The federal government has a significant role to play in continuing to support this important research, including funding randomized experiments that clearly show which curricula produce the largest achievement gains. Just as it does with medicine, the federal government should fund comparative effectiveness research. State education agencies also have a role to play in collecting the necessary data and making them available for studies of curricula quality.

- **Improve the state textbook adoption process.** Nineteen states have a curriculum adoption process that produces a list of products that schools either must use or are encouraged to use.⁴ When hard evidence on curriculum quality is available, it should supersede the often vague impressions of stakeholder groups that frequently dominate the process. Additionally, states should replace their often limited approaches to measuring alignment to state standards by commissioning professional alignment studies of proposed curricula. States without an adoption process should consider creating one that provides actionable information to aid districts in selection decisions. Louisiana, for instance, allows districts to have complete autonomy over the selection of all their instructional materials, but the state provides districts with annotated reviews of instructional resources and groups materials into tiers based on their quality.⁵ All states should continue to allow schools to select the instructional products that are right for them but should also provide clear and accurate information about quality that obviates the need for every district to determine the effectiveness of instructional materials.
- **Improve the selection process in school districts.** For years, school districts have struggled to make informed curriculum decisions, in large part due to a lack of reliable information on product quality. Improving the adoption process at the state level will be an important step in the right direction; but districts still need to choose the right product from the list of options provided by the state, or another product when appropriate. One promising strategy currently used in some districts is to pilot new products alongside existing products in order to produce evidence on effectiveness before committing to the new product.⁶ Districts can also benefit by increasing information sharing across districts about experiences with different instructional products.
- **Create a competitive grant program devoted to creating high-quality curricula.** Although the Common Core presents an important opportunity to improve instructional materials, some publishers are making overly zealous claims about their materials' alignment to the standards.⁷ Philanthropists and other independent groups should spur the creation of high-quality textbooks and other instructional materials by creating a competitive grant program. Nonprofits, small publishing companies, and innovators would then be able to apply for grants to develop and scale-up promising high-quality, openly licensed, Common Core-aligned curricula. The grant program would reward innovation, scalability, and evidence-based research supporting the key components of each curriculum.

In education, it is rare for a reform to show strong outcomes and be relatively inexpensive. However, curriculum reform is both cost-effective and worthwhile and should become a more central part of the effort to improve the nation's schools.

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