

“Moneyball” for Education

Using Data, Evidence, and Evaluation
to Improve Federal Education Policy

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More than a decade ago, Michael Lewis penned the influential book *Moneyball*. An examination of how Oakland Athletics General Manager Billy Beane used data to make his franchise competitive with wealthier baseball teams, the book struck a chord. Beane’s strategy of making decisions based on data had a powerful and positive impact on the performance of the Oakland A’s, and people quickly saw that this practice could and should be more widely applied.

Most policymakers support the idea of using good data and evidence to make federal spending smarter—especially when it comes to investments in America’s children. The trick is determining just what good data and smarter spending actually mean, and to make sure people use them and don’t just talk about them. That is where so many pleasant points of abstract agreement can break down in practice.

This paper suggests ways to revamp federal education policies and programs to help lawmakers spend public funds more effectively and efficiently to improve student outcomes. The aim is to identify a set of proposals that have some bipartisan appeal and can make a practical difference. This effort was informed by thinking from a select group of seasoned experts from the left and right who have much experience with federal education policy. Given strong-principled disagreements about the nature of the federal role in education, three caveats are vital.

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First, this exercise assumes that the recommendations will be revenue neutral. This is not meant to suggest that these recommendations do not carry a cost, but rather that where there is a cost, we assume that the requisite funds would be found within the existing education budget by shifting funds as necessary. Thus, the focus is on how money is spent, not whether federal spending should be increased or decreased. While we have our own biases as to how much Uncle Sam should spend, we agree that—whatever the level of spending—it is possible and necessary to spend existing funds more effectively, and it is possible and necessary to find common ground on this count.

Second, this exercise does not assume that the federal government should dictate to states or localities exactly how to spend their funds. Some advocates think it beneficial for the US Department of Education to play an assertive role in determining how states, schools, and colleges educate students. That is a discussion for other venues. Here, our premise is that the federal government has a key role to play in promoting the use of data, evidence, and evaluation in education because these are, in important ways, classic public goods.

These are activities for which it can be difficult for an individual school, system, or state to marshal substantial resources, and that yield benefits that flow to all takers—whether they helped foot the bill or not. These kinds of activities are consistent with a limited federal role and the distinctive responsibilities of the federal government. The feds can also enable and support state officials and local educators to make informed decisions about effective programs and practices. This paper explores some ways the federal government can

and should apply “moneyball” principles to its own decision making to make federal programs more effective and efficient.

Third, moneyball strategies are not imagined to suggest that we should only value what can currently be measured, or paint everything as either “working” or “not working.” Context and implementation often belie that simple construction. It does, however, mean that we should

- Collect better, more useful data and build evidence about how well programs and policies work;
- Use evidence to improve practice and inform policies; and
- Shift funds toward those things that deliver more promising results.

Even with these caveats, however, promoting more use of data, evidence, and evaluation to do better for students is too important to pass up. Moneyball could also present a bipartisan pathway forward at a time when much of education policy seems to be increasingly stuck in fruitless debate.

Ten Tenets to Guide Policy

Through our discussions with seasoned experts, we derived a number of key ideas that can yield better use of data, evidence, and evaluation to improve student outcomes. We’ll briefly describe them here.

1. Clarify the Outcomes. Linking outcomes to funding requires clarity about expected outcomes. Lawmakers should adopt the habit of prefacing legislative proposals with a statement that explicitly sets out the intended outcomes. This would make it easier for executive agencies to link their funding habits to the willingness of grantees to track their progress in reliable and valid ways. Such an exercise could inform program management and future decisions about appropriations and authorizations for the program in question.

2. Ensure that Measurement Is Credible. It is not clear that we know all the right measures of program effectiveness or that there are parties universally trusted to generate accurate and, thus, authoritative measurements. Therefore, who should do the measuring, and how should they should do it? Relying on referees whose impartiality is suspect quickly undermines any discussion of metrics. There is a need for honest brokers who are widely trusted to collect and report data and oversee credible evaluations.

The trick to making federal education spending smarter is determining just what good data and smarter spending actually mean.

3. Recognize the Limits of Measurement. Currently, many important educational outcomes cannot be easily or effectively measured. While we want students to improve their reading and math achievement, graduate from high school, and earn a solid paycheck after completing their postsecondary education, we also want them to learn to be creative, responsible, and self-reliant thinkers and citizens. A focus on performance outcomes ought not mean looking only at those things that can be readily measured. When outcomes cannot be clearly specified or measured, policymakers should resist the temptation to reflexively use only available measures (such as reading and math scores) as simple proxies. Instead, they should encourage the creation of a variety of measures, building knowledge and evidence about student outcomes. This will require flexibility to try a variety of things, allowing for failure, and studying various efforts.

4. Avoid Overly Broad Judgments of What Works. The complexity of federal programs means that it is often difficult to determine what works, especially when assessing a complicated

law or funding stream with many moving parts. For instance, in the case of No Child Left Behind (NCLB) or even Title I of the Elementary and Secondary Education Act (ESEA), determining whether a statute or funding stream improved schools requires evaluators to conflate an extraordinary morass of interventions and local context and then determine which outcomes are the right ones to measure.

The reality is that it will be hard for anyone to ever say that NCLB or Title I did or did not work. Put simply, when discussing what works in education, there is a tendency to confuse discrete interventions with programs or funding streams. For instance, carefully tailored turnaround interventions may be cost effective and beneficial when carefully implemented in specific schools. Yet, the impact of a broad funding allocation for the School Improvement Grant program may prove much more uncertain.

When discussing what works in education, there is a tendency to confuse discrete interventions with programs or funding streams.

5. Distinguish between Usefulness to Educators and Usefulness to Federal Officials. It is important to distinguish between evaluating individual interventions or grantees and the more uncertain urge to evaluate whole programs. Evaluating interventions and grantees can help state leaders and local educators make better decisions, but this will be of more limited value to federal officials trying to decide whether to continue an entire program or to increase or decrease program funding. At the same time, examinations of intervention efficacy may help inform federal decisions regarding desirable changes in program design or whether to direct funds away from some grantees or interventions and toward others.

6. Scale Based on Evidence. Many federal education programs scale up with little or no evidence of effectiveness. While these decisions are frequently political (for example, when creating programs big enough to touch most congressional districts), they may not be the best strategy for investing taxpayer funds. Programs should be expanded more intentionally, in proportion to evidence that they are having a beneficial impact. Because programs have grown without such evidence, it is worth seeking ways to encourage use of evidence in large-formula funding streams (such as Title I or Title II).

7. Encourage Cost-Benefit Analysis. When evaluating program success, it is not just the results that matter, but also the cost of producing them. If a program produces results that are 50 percent better than an alternative program but costs 100 percent more, it can be deemed successful but still represent a bad investment in cost-benefit-analysis terms. One limitation of accountability in education today is that outcome measures are rarely linked to the cost of producing those outcomes. A simple starting place is to make more precise and transparent cost accounting a condition of federal aid. Pairing those cost data with outcome data would make it possible to start examining how cost effective some programs are in producing selected outcomes, and what that means for their scalability.

8. Build Demand for Evidence of Effectiveness. Given competing demands and limited capacity, today’s schools and systems are not always avid consumers of evidence or data. As a result, it is rarely clear that schools and systems are selecting programs or products based on determinations of cost effectiveness or quality. Instead, many decisions are driven by routine, inertia, marketing, or personal relationships. Incentives that encourage the use of evidence may be one way to improve demand in this area. Surely, creating a better supply of evidence would also stimulate demand, including better and more useable evidence and tools that can help schools and systems become smarter consumers.

9. Link Federal Funding to Promoting Data, Evidence, and Evaluation. Given the need for more precise metrics on program dynamics, outcomes, and costs—and the difficulty in determining whether large federal programs work—there is a strong case for basing federal funding on the more modest goal of encouraging the collection, reporting, and use of data that can, in turn, drive better decision making. This could entail crafting programs that place more emphasis on grantees being willing and able to produce evidence that supports research and improvement.

It could also imply a broader obligation for those receiving federal funds to spend them on evidence-based activities while also contributing to evidence and research. Or, it could result in the release of some data sets generated by grantees to be used by other grantees or researchers, akin to a process carried out by the National Institutes of Health (NIH). Most obviously, this would ensure that at least some portion of each federal program be used to advance the evaluation and research needed to make that program more effective.

10. Remove Barriers that Stifle Moneyball Strategies. One potentially powerful way to help states and districts spend their current funds more effectively is to take a hard look at existing rules and regulations (such as “supplement not supplant” or “time and effort reporting”) that may serve to dissuade districts from shifting funds toward more effective or evidence-based practices. It is possible to envision a shift in which states, districts, or schools are given a way to obtain more flexibility in return for increased transparency or demonstrated results. An example of this approach is the Performance Partnership Pilots program (see the Performance Partnership Pilots textbox).

Policy Recommendations: An Appropriate and Disciplined Federal Role

There are at least a few instances where it is clear that federal policymakers can find some common ground

in promoting moneyball practices in education policy. At a high level of abstraction, it is easy to agree on the value of better measuring the impact of federal spending and ensuring that those funds are spent in more cost-effective ways. The challenge is in the fine print. Here, we offer some concrete recommendations that may help on this score.

1. Develop Solid, Trusted Metrics to Improve Federal Programs. In any field, there is a natural tendency to measure what is convenient. An ongoing challenge in education is the paucity of outcomes that are routinely measured. Aside from reading scores, math scores, and completion (graduation) rates, the cupboard is fairly bare. In baseball, moneyball required that enormous energy be devoted to developing a wealth of new, more granular metrics that offered a much richer portrayal of the game. The challenge was not to make more aggressive use of old measures but to develop more precise ones. Current practice is particularly problematic for programs that are not necessarily designed to boost reading or math scores. There is a need for richer, more robust, and more regularly used metrics.

The Institute of Education Sciences (both an independent entity and an agency of the Department of Education) ought to develop an array of leading indicators that track performance, offer insight into practices, and help predict or lead to improved student outcomes. These indicators would serve as a readily available toolbox of metrics.

States, school systems, and other actors would be empowered to select the most useful metrics and to ensure that measurements are collected in comparable ways, helping build knowledge for the future rather than merely ensuring compliance in the present. Finally, a portion of federal research funds should be used to fund this work. Given that many state, district, and school leaders already feel data rich but knowledge poor, the work should focus on essential, easily understood metrics and on the field’s capacity to use them.

Collaborating to Develop Improved Metrics

Over the past two years, the White House has partnered with the William and Flora Hewlett Foundation to host a series of meetings for researchers, policymakers, and funders to explore how best to assess the hard-to-measure 21st-century competencies required for success in college, career, and civic and everyday life. These include interpersonal competencies such as oral communication and collaboration, and intrapersonal competencies such as learning to learn and cultivating an academic mindset. Strategic, sustained investments in research and development are needed to overcome technical, implementation, political, and public-acceptance challenges. The participating stakeholders are identifying short- and long-term initiatives to strengthen existing approaches and develop and validate new approaches to measuring these deeper learning competencies.

Therefore, we recommend that

- The Institute for Education Sciences (IES) redirect a portion of existing research and development funds to help identify a broad set of indicators that lead to improved student outcomes, and refine them over time;
- The Department of Education provide these indicators to state and local recipients of federal funds as options for data collection; and
- The National Center on Education Statistics, as part of its annual data collection, collect data on a range of these indicators from a sample of states and school districts, and make the results public.

2. Devote a Portion of Funds to Evaluating Programs and to Building States’ and Local Decision Makers’ Capacity to Learn What Works. Local officials and educators have limited time and money to assess the efficacy of various

interventions, and even less capacity to judge the component parts of a given intervention. The Regional Education Laboratories and Comprehensive Centers have long been charged with helping on this score, with sometimes mixed reviews.¹ Part of the challenge has been the limited number of evaluations and limited attention to granular measures of implementation and success. Much more investment is crucial if federal education programs are to have a bigger impact in the future.

To jump-start this inquiry, a share of program funding should be set aside for high-quality evaluation and research. This investment would help the federal government get its own house in order by providing information on the success of various grantees and interventions. It would also provide evidence that educators and policymakers could rely on to inform their own decision making, and it could inform policymakers’ decisions to improve the programs overall. To have the desired effect, the results of this research and evaluation should be widely disseminated, transparent, public, and useful to various stakeholders.

The Department of Education could require grantees receiving federal dollars for selected activities to explain how they expect to evaluate or learn from their interventions and use this information to improve over time. Structured appropriately, this could provide for more effective interaction between federally funded research entities and educators. Care would need to be taken to ensure that this would not create new paperwork demands; rather, the goal would be to foster transparency and use of data for continuous improvement.

Many educators have begun to engage in “improvement science,” using data to improve their practice. These efforts benefit from hubs (such as those supported by the Carnegie Foundation for the Advancement of Teaching) that coach educators in clarifying problems, selecting appropriate interventions, collecting and analyzing data, and making the appropriate adjustments. Redirecting some federal funds to support these hubs could both grow the group of educators tackling this work and increase the impact of

Current Efforts to Improve Program Evaluation and Leverage Data

In 2014 and 2015, Congress included a provision in its annual spending bills that would allow the Department of Education to reserve up to 0.5 percent of ESEA funds—except Title I and Title III funds, and those for programs that already have an evaluation provision—for evaluating the effectiveness of federal education programs and the grantees and interventions that they fund. The fiscal year 2016 budget request goes one step further and seeks authority for the Department of Education to set aside evaluation funds for ESEA, higher education, student financial assistance, student aid administration, career and technical education, adult education, and rehabilitation services.

Congress has provided the Department of Labor similar authority to set aside 0.5 percent of funds for program evaluation. The US Agency for International Development’s Evaluation Policy states: “On average, at least 3 percent of the program budget managed by an operating unit should be dedicated to external evaluation.”¹

The Carnegie Foundation for the Advancement of Teaching is a leader in bolstering grantees’ ability to leverage data, evidence, and evaluation. For example, the members of Carnegie’s Student Agency Improvement

Community (SAIC) combine academic research and improvement science methods to help students build perseverance, especially in the face of rigorous academic challenges. The SAIC develops, implements, studies, and improves resources and strategies that cultivate students’ academic mindsets, sense of belonging, and ability to apply concrete learning strategies.

The Carnegie Foundation serves as the central hub for this improvement community by providing analytics and network support and a common theoretical framework and measures. As data from the field tests come into the hub, researchers and practitioners collaboratively identify improvements, which the practitioners then cycle back into the field for further testing. The ongoing improvement efforts promise to yield outcomes far greater than what any of the individual members could accomplish on their own.

Note

1. Results for America, “Investing in What Works Federal Index,” May 2014, <http://results4america.org/policy-hub/investing-works-federal-index-may-2014/>.

their efforts. This kind of locally driven innovation and data utilization could be a powerful way to leverage limited federal support.

What educators and policymakers need, above all, is much more in the way of timely, digestible information about what works. The Department of Education should focus on making available a much broader array of evidence regarding existing practices and policies, including contextual information such as step-by-step guides, webinars, and materials showing how to apply evidence-based, cost-effective practices in school settings, some of which is underway. The What Works Clearinghouse is helpful to a point, identifying rigorous research studies that show the positive impact of some programs on student outcomes. But the department could

do better on this front by using its agents, such as the clearinghouse and the Regional Education Labs, to make evidence and research more usable. For example, the department could produce implementation studies that identify how to put programs into practice, and issue more user-friendly documents that are more readily used by practitioners.

Therefore, we recommend that

- The Department of Education set aside a small but significant percentage of all program funds for performing high-quality program evaluations, in partnership with IES;
- The department and IES do more to make public and widely disseminate the results of

evaluations in a format that is useful to educators and policymakers;

- The department require grantees participating in evaluations to explain how they will use the results for continuous improvement, as appropriate;
- The department and IES enhance their production of a broader set of evaluative information, including rapid-cycle evaluations, quick data collections, implementation guides, step-by-step practice guides, and webinars; and
- Congress identify other budget savings opportunities and appropriate \$150 million to support evidence-based innovation through hubs that can aid state and local entities that are testing promising ideas, help evaluate and improve them over time, and boost states’ and school districts’ capacity to engage in evidence-based improvement.

3. Ensure the Use of a Trusted Entity and Process in Program Evaluation. Federal grant competitions or programs (such as Reading First or Race to the Top) have suffered due to the ad hoc and seemingly political nature of their execution. Congress can help by improving the independence of grant competitions and program evaluations, insulating reviewers from (real or perceived) political pressure and helping ensure that consistent and transparent evaluation procedures are applied in a valid, credible, and independent fashion.

When we consider the consistent challenges that have bedeviled high-profile educational efforts, it seems apparent that an independent, established application-review process—with clear mechanisms for determining reviewer qualifications, selecting reviewers, and assessing evidence—could help programs work as intended by Congress while helping allay concerns about inappropriate external influence. Any competitive grant should be required to operate through this infrastructure so that program administration and

The National Institutes of Health’s Clear Norms and Established Grantmaking Process

The NIH annually awards more than \$30 billion to promote research projects at universities, medical schools, and research institutions. More than 80 percent of NIH funding is awarded through competitive grants to more than 300,000 researchers at more than 2,500 universities, medical schools, and other research institutions worldwide. Roughly 10 percent of the NIH’s budget supports projects conducted by scientists in the NIH’s own laboratories. Despite the massive volume of funds distributed every year, the NIH’s clear norms and established grantmaking process have allowed this to play out with broad credibility and few concerns about politicization. This is partly due to the grant process being clear, consistent, and publicly disclosed.

evaluation are undertaken with sufficient capacity, expertise, and objectivity to yield a data- and evidence-driven program. One challenge to be recognized and addressed, of course, is that the bench of peer reviewers available to the department for a typical grant review process is quite limited

Similar protections should be developed (or safeguarded where they currently exist) to ensure that any federally funded evaluations of programs, policies, and interventions are objective, insulated from political pressure, and consistent with professional standards. This is critical for allowing funding and policy decisions to be informed by the evidence these evaluations produce rather than engendering suspicion. And it is key to ensuring that evaluation results are trusted and utilized by the field.

Therefore, we recommend that Congress direct IES to set forth transparent and benchmarked standards, norms, and routines to guide the evaluation of future Department of Education grant programs or competitions. This should include questions about reviewer qualifications and standards of evidence.

4. Produce Meaningful Spending Data that Supports Cost-Benefit Analysis. Pairing outcomes data with cost data can clarify what bang we get for our education buck. It would also enable better research on the effectiveness and efficiency of education programs. A first step is encouraging more transparency about actual costs and spending practices. This requires more consistent and credible accounting.

While states and school districts currently report expenditures data to the National Center on Education Statistics and the Office for Civil Rights, these figures are neither entirely reliable nor directly comparable in any meaningful sense. For instance, there is currently enormous variability in how school districts account for the costs of special education staff or reading materials. One factor is the simple lack of clear, established accounting practices in the sector. Another is a fear of running afoul of guidelines governing the use of federal funds, which leads local leaders to allocate money in ways that will pass muster with auditors rather than in ways that will necessarily present the most accurate picture of district outlays.

More accurate numbers are needed. One promising solution is for the Council of Chief State School Officers and the Council of Great City Schools (CGCS) to build on their ongoing efforts to work with state and local officials to devise new rules for more precise and comparable cost accounting. Once established, those rules should be adopted by the Department of Education and used to simplify and improve reporting on expenditures. To facilitate this effort, the department should work with states and districts to ensure that they will not be penalized by auditors for changes in reported spending due to new accounting rules. For greater accuracy, transparency, and potential efficiencies, federal officials will need to build more flexibility into oversight and auditing.

Once trusted, comparable measures are in place, Congress and current and future administrations should annually collect expenditure data from all school districts and grantees and make such data publicly available. This will enable state

The American Product Quality Council’s Lessons for the Council of Great City Schools

The American Product Quality Council (APQC) was formed in the 1980s to help interested corporations find ways to benchmark their performance and ensure they were providing the best, most cost-effective services possible. The APQC also supports their ability to collaborate on particular challenges and offers access to a massive database of best practices. All of these services are provided without coercion or public funding. The APQC’s successful track record has been emulated by the CGCS. For more than a decade, the CGCS has convened urban education leaders to help them benchmark performance in areas such as school bus operations, payroll processing, and staff absenteeism. The effort has helped participating districts align their measures, spot problem areas, identify potential savings, and learn from peer districts that are enjoying more success at the task of interest.

and local leaders to learn from one another and will allow for better research on program efficacy. Eventually, such an infrastructure could allow the Office of Management and Budget to require the Department of Education to justify above-inflation requests for increases in funding with a cost-benefit analysis. And it would allow the Congressional Budget Office to incorporate cost-benefit analysis when scoring education bills, allowing policymakers to make more sophisticated judgments about which programs are likely to yield the greatest return on investment.

Therefore, we recommend that

- The Council of Chief State School Officers and the Council of the Great City Schools extend their ongoing efforts by convening a task force to devise rules for common cost accounting and common productivity indicators that allow for determining the costs and benefits of school expenditures;

- The Department of Education establish a pilot project wherein a handful of states and school districts agree to report more accurate cost-benefit data without having to fear adverse accounting procedures to field test the new measures;
- Once new cost-accounting measures are approved, the National Center of Education Statistics and the Office of Civil Rights include them in their regular data collections and make such data publicly available; and
- Once approved and tested, the Office of Management and Budget ask the Department of Education to justify increases in its grant programs through use of a cost-benefit analysis.

5. Make Education Programs More Evidence

Based. A clear step to take is to revamp federal programs to favor interventions with evidence of effectiveness while building the evidence base. If federal policymakers seek to ensure that federal funds are being spent cost effectively, they should seek to put the available evidence to good use. Congress should ensure that programs are targeted and designed to boost particular outcomes, and then support processes that drive dollars to practices and entities with successful track records. Determining the proper criteria and evaluations of performance ought to be entrusted to the independent process recommended previously, with an eye to judging applicants based on past performance or the evidentiary case for proposed measures.

Make Competitive Programs More Evidence Based.

In competitive grant programs, the department should give the highest priority to proposals with strong evidence of success and that include plans for evaluating their approaches and building their evidence base. Grantees with less compelling but still sufficient evidence should receive smaller sums to test promising, innovative approaches. Such a tiered-evidence approach may steer more funds toward certain providers and thus reduce the total number of grants awarded. But steering

dollars toward the most effective grantees, and seeking to learn from them, is a promising public-investment strategy.

Another option is to award bonus points to grantees that demonstrate greater evidence of effectiveness, and to weight evidence at least equally with other preference factors in grant competitions. With any of these approaches, it would be important to provide ample technical assistance to applicants that may lack the capacity to write grant proposals that incorporate evidence (potentially including small rural districts or non-profit organizations).

Therefore, we recommend that

- The Department of Education apply a tiered-evidence framework to its major competitive grant programs that provides greater funds to those grantees with greater evidence of effectiveness, while providing lesser funds to promising ideas with lesser but sufficient evidence of effectiveness and requiring evaluations to build evidence;
- In making competitive grants, the department award bonus points to grantees with greater evidence of effectiveness; and
- The department provide or support technical assistance to grantees that lack the capacity to compete for traditional competitive grants.

Make Formula Programs More Evidence Based.

Consistent with earlier recommendations, it may make sense to require formula grantees to devote a portion of funds to proven, evidence-based interventions (such as those identified in the What Works Clearinghouse). Another approach might be to allocate funds in accordance with the formula, but require that new federal funds (in other words, funding increases) go toward programs or practices with greater evidence of effectiveness. Although formula funds are and should remain flexible, that flexibility is not inconsistent with expecting some burden of evidence when it comes to justifying the use of those funds.

Evidence-Based Charter School Programs

In 2015, Congress allowed the Department of Education to invest up to \$75 million of the \$253 million appropriated for the Charter Schools Program in grants for the replication and expansion of high-quality schools. This initiative provides competitive grants to nonprofit charter management organizations to help them expand student enrollment at charter schools with demonstrated records of success and to open new charter schools based on models that have significantly increased academic achievement for all students. Additionally, applications were scored in part on the quality of their evaluation plan. This up-front attention to evaluation will ultimately contribute to the knowledge base about what works, while the bulk of funds are scaling what is proven to work.

In December 2014, the department issued its final application for the Student Support Services Program (SSS) within the TRIO educational opportunity outreach programs (\$297.5 million was set aside for SSS in fiscal year 2015), which will allocate up to two competitive preference priority points to applicants proposing to offer individual counseling activities based on at least moderate evidence of effectiveness. Another two points were available for applicants proposing evidence-based strategies to develop students’ noncognitive factors through the SSS grants.

Therefore, we recommend that

- Congress require recipients of large-formula grants to dedicate a portion of their funds to proven, evidence-based activities or to demonstrate in some way that their use of funds is based on evidence;
- Congress tie increases in formula dollars to recipients demonstrating that funds will be used for evidence-based activities; and

- Congress find ways to direct more formula funds toward grantees with a track record of success.

6. Explore Innovative Approaches to Boosting Program Outcomes and Performance. A number of models could help steer federal resources to only those grantees that achieve desired results. One approach would entail shifting some competitive grants to a performance-based contract model in which funds are awarded based on discrete outcomes rather than proposed plans. Given the disinclination of federal officials to yank funds, even when grantees fail to fulfill expectations, such an approach may prove more viable for linking funding to performance.

An alternative approach would employ Pay for Success or Social Impact Bond pilots that leverage private dollars to initially pay for interventions, with public funds flowing to the investors only if they generate promised results. Some federal programs could allow funds to be used to support these efforts, especially in areas that are ripe for pilots—for example, early-childhood education, dropout prevention, and remediation or help with postsecondary transition.

The Utah High Quality Preschool Program

In Utah, a coalition including the Goldman Sachs Urban Investment Group, United Way of Salt Lake, and the J. B. and M. K. Pritzker Family Foundation’s Early Childhood Innovation Accelerator created a Social Impact Bond to finance early childhood education. The goal of the \$7 million investment, the Utah High Quality Preschool Program, is to increase school readiness and academic performance for at-risk three- and four-year-olds. Under this public-private partnership’s theory of action, the up-front investment will ultimately lower overall public spending due to reduced special education referrals, demand for costly interventions and remediation, and other savings stemming from more children entering kindergarten ready to learn.

Therefore, we recommend that

- The Department of Education pilot a performance-based model in a competitive grant that makes subsequent grant payments when grantees achieve agreed-upon outcomes. Similarly, states that run grant competitions with federal funds, such as 21st Century Community Learning Centers, could do the same; and
- Congress authorize the use of federal funds for Pay for Success initiatives. Where such authority exists, the department should clarify that federal funds can be used in this way.

7. Establish Pilot Projects that Emphasize Data-Driven, Evidence-Based Continuous Improvement. Ill-devised accountability systems can discourage transparency, lead to the manipulation of metrics, and prompt defensive compliance. This is especially problematic because, in any number of fields—from baseball to automotive design—21st-century advances have been the handiwork of creative minds making use of precise information. As Congress and federal officials discuss ESEA reauthorization and proposals for evaluating colleges of education and institutions of higher education, they should weigh the merits of piloting approaches that emphasize transparency and continuous improvement over one-size-fits-all federal solutions.

For example, the federal government could provide additional flexibility in terms of reporting and activities requirements if grant recipients identify clear goals, use data to precisely track spending and outcomes, adopt feedback mechanisms to support improvement over time, and agree to evaluate their activities in order to build evidence about what works, similar to the way the Performance Partnership Pilots operate (as described in the Performance Partnership Pilots textbox). Therefore, we recommend that Congress authorize pilot projects, under existing programs, that allow grantees greater flexibility in use of funds and reporting in exchange for setting

The Performance Partnership Pilots

The Performance Partnership Pilots were authorized by Congress in 2014 and 2015 to offer states, communities, and tribes more flexibility when it comes to serving disconnected youth. The pilots allow grantees to employ outcome-focused criteria rather than requiring up-front restrictions on program design or content. Interested parties will submit proposals that detail their strategy and clear metrics of success. Communities will be able to blend competitive and formula grant funding that they receive from the Departments of Education, Labor, and Health and Human Services and the Corporation for National and Community Service. Pilots will also be able to seek waivers of specific program requirements that may inadvertently hamper effective services. This flexibility will only be granted to 10 high-performing jurisdictions that will then be held accountable to a set of cross-agency, data-driven outcomes.

clear outcomes-based goals, using data to track progress, and evaluating improvement over time.

Conclusion

Moneyball was not an endeavor of Major League Baseball. It was pioneered by the general manager of one franchise and eventually imitated across the sport—and then across the nation’s professional sports leagues. But that process depended on an ecosystem of information that had grown up around the sport and institutional structures that rewarded success. Similarly, moneyball in education ought not be read as an invitation for federal officials to imagine they should tell states or communities exactly how to improve schooling. Where the federal government can usefully contribute, though, is by helping nurture the ecology of information, institutions, and incentives that will make it easier for educators to lead the way. Our recommendations are proffered in the hope that they will do just that.

Note

1. See Government Accountability Office, “Education Research: Further Improvements Needed to Ensure Relevance and Assess Dissemination Efforts,” 2013, www.gao.gov/products/GAO-14-8.

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