

Fostering Innovation

How User-Centered Design Can Help Us Get the Local Control Funding Formula Right

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About the California Collaborative on District Reform

The California Collaborative on District Reform, an initiative of the American Institutes for Research, was formed in 2006 to join researchers, practitioners, policymakers, and funders in ongoing, evidence-based dialogue to improve instruction and student learning for all students in California's urban school systems.

About Pivot Learning

Pivot Learning is a nonprofit organization whose mission is to revitalize our public school systems so that all students have the opportunity to succeed in college and career. We partner with education leaders at all levels and provide them with the knowledge, skills and support proven to strengthen educational systems and transform teaching and learning.

Introduction

The Local Control Funding Formula (LCFF) has introduced positive and much-needed change to California's approach to K–12 education funding by allocating resources according to student need and freeing districts¹ from the restrictions of categorical programs to make decisions that address local priorities. However, important challenges remain. Early stages of policy design have created guidelines and expectations that too closely resemble the compliance orientation that preceded LCFF and, thus, undercut the potential of the new approach. To ensure long-term viability, experimentation is critical to refining the funding system so that it advances the twin goals of equity and local control. With that in mind, design teams composed of stakeholders from across California—end users who actually develop and use the Local Control Accountability Plans (LCAPs) districts create—met in November 2016 to develop potential solutions that address the root causes of existing problems and promote the goals of LCFF.

The Political Context: Innovation May Be Necessary to Preserve LCFF

For all the positive changes that LCFF has introduced, the LCAP has received criticism for being archaic, cumbersome, difficult to complete, opaque, and incoherent. In particular, the advocacy community has argued that current system provides insufficient transparency to gauge commitment to LCFF's equity goals (e.g., Chen & Hahnel, 2017). At the same time, educators have struggled with rigid regulations for planning and reporting that burden staff and reinforce a compliance mentality (Koppich, Humphrey, & Marsh, 2015). In the spirit of continuous

improvement, these early LCAP flaws should be an expected feature of a monumental effort to break free from decades of highly scripted, complianceoriented, and inequitable budgeting and planning. Indeed, reports from the field reflect continued support for LCFF despite its as-yet unresolved shortcomings. More than six in 10 Californians support LCFF (Baldassare, Bonner, Kordus, & Lopes, 2017), and district and county leaders have frequently reported that the policy is a move in the right direction and should be preserved (e.g., Blum & Knudson, 2016; Humphrey et al., 2017; Koppich et al., 2015; Warren, 2016).

Nevertheless, LCFF's flaws make it politically vulnerable. The funding system has been developed and implemented with the forceful support of Governor Jerry Brown, who has less than 2 years left in his final term and who has championed the principle of subsidiarity (i.e., that decisions are most effective when made at the most immediate local level consistent with their implementation).² Whether by political persuasion or by job description, some lawmakers may not necessarily agree. Legislators come to Sacramento to legislate. For these elected officials, categorical programs like those that dominated pre-LCFF school funding in California are a tangible and attractive way to demonstrate leadership on education issues. Traditional approaches to accountability are familiar to state actors and many may seek to revert to the kinds of paper trails that have failed in the past especially in response to political pressure for more transparency in resource allocation. Even within the structure of the existing funding formula, we might soon see the creep of new categorical programs and requirements into the education landscape as lawmakers seek to enact their own priorities. Thus, well-intentioned policy changes could undermine the spirit of LCFF by layering on new programs that the new funding system was explicitly designed to avoid.

With officeholder turnover looming in 2018, now is the time to refine and improve LCFF. To do so requires innovation and deep engagement of those who will create and use the LCAP at the local level. Indeed, creating the space for districts to develop alternative tools and approaches to the LCAP is a key recommendation put forward by a collection of researchers who have studied LCFF implementation since the new policy began (Humphrey et al., 2017). Moreover, if we embrace thoughtful experimentation now, then tested improvements will be ready to inform district practice and the state's new lawmakers when they come to Sacramento.

The Traditional Approach: The LCAP Preserves Flaws That Undermine Its Effectiveness

In many ways, the shortcomings of the current LCAP template are a reflection of the process that created it, a process typical of many such development efforts. Although the designers of the LCAP sought input from a range of stakeholders, those stakeholders did not actually participate in the process of designing and testing the LCAP itself. Rather, a team of experts created the template centrally, and the future users had no opportunity to try the template and process before its first official rollout in 2014. Moreover, despite the many (sometimes competing) purposes ascribed to the LCAP³ and the vastly different local contexts in which it was to be applied, the process and template offered a single approach, a single document that required each district—no matter its size, population, or conditions-to fit the same mold.

To be fair, the State Board of Education has made adjustments in the template in response to criticisms that began emerging from its first use. The most recent template iteration, adopted in fall 2016, addresses some of the early LCAP shortcomings. For example, the requirement for a plan summary creates space to capture the overall district story that might otherwise be lost in tables of goals and expenditures; in addition, transitioning to an actual 3-year planning process should relieve some of the burden on districts, who previously had to develop a new rolling 3-year plan every year. Still, many of the underlying issues remain. As a single static document, the LCAP carries an overwhelming set of expectations built to serve many purposes and satisfy the wide-ranging demands of multiple stakeholder groups.

An Alternative Approach: User-Centered Design Opens New Doors

Design thinking emerged from the software sector, but during the last decade, educators have been employing "user-centered design" more often and more effectively to solve key system challenges. Design thinking flips the typical top-down model for developing and implementing policies and initiatives in education by focusing on the "end user" of that policy. For example, if the goal is the development of a parent engagement initiative, instead of developing the approach exclusively within a district central office, a user-centered design process actively engages a broad array of parents and community stakeholders. It collects and seeks to understand their experiences as users of the current system and actively involves them in the design of the new one. By enrolling a diverse set of stakeholders, capturing their voices, and leveraging their insights, design processes structure the bottom-up work that is an essential part of any change process. Because this process is structured, leaders can use it to engage staff and stakeholders without feeling that they are losing control. Experience tells us that providing some structure for the creative process can actually help people to be more creative. Finally, because most change efforts are unsuccessful, design builds in the expectation that first efforts will almost always be rough drafts and that prototypes of new initiatives will be imperfect. The use of rapid prototyping makes it easier for groups to fail early to succeed fasteran important contrast to the process of rolling out a new tool or process, and then changing it every year because design flaws have not been addressed before it goes to scale.

Defining Terms

Design thinking: A mind-set that emphasizes empathy, creativity, and the idea of "rapid prototyping" as a route to solving problems.

Design cycle: A formal process that systematizes design thinking and uses it to create something new.

Design challenge: A formal or informal prompt to create something new. A design challenge can be posed by a leader, a new policy, or changes in a district's context.

Design brief: A formal document that a leader uses to define a design challenge and assign it to a group or design team.

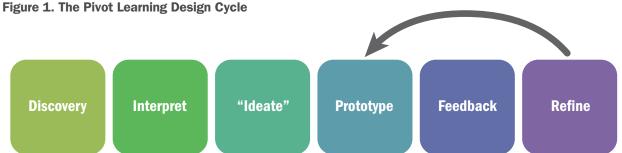
Design team: The group that takes on a design challenge.

The Design Cycle

The Pivot Learning design cycle is a hybrid of the model developed by the design firm IDEO and that from the Henry Ford Institute for Learning. As depicted in Figure 1, the design cycle contains the following steps: discovery, interpret, brainstorm or "ideate," prototype, feedback, and refine.

The Design Challenge

This design process begins with the development of a design challenge—a problem reframed as an opportunity that identifies an explicit focus for the design process. In this case, Pivot Learning and the California Collaborative reviewed the research and spoke with stakeholders around the



The advantage of using a formal design cycle is that its systematic and stepwise process provides a structure within which a collaborative creative process can unfold. Because a design cycle includes all the steps, it is a good way for people to learn or practice the habits of mind known as design thinking. The design cycle is an especially useful way to structure the work of the team that most school districts will naturally create when they take on a complex task. Examples of Pivot Learning's previous work with districts include redesigning the teacher evaluation process and developing the implementation plan for the Common Core State Standards. Apropos of the theme of this document, beginning in 2016, a combined team from Pivot and the California Collaborative on District Reform applied the Pivot design process to tackling the shortcomings of the LCAP process and template.

state to identify the most pressing priorities for the LCAP. Based on these conversations, the project separated four purposes of the LCAP process and template (parent and community engagement, strategic planning and budgeting, communication and transparency, and accountability and support) into a set of four design challenges:

- 1. How can districts engage local stakeholders in meaningful planning and budgeting? (Note: The emphasis here is on meaningful planning.)
- 2. How can districts most effectively align budgets and strategic priorities?
- 3. How do we create a product that provides transparency around planning and budgeting in a coherent manner?
- 4. How can we effectively demonstrate that districts have complied with the intent of LCFF?

Our assumption was that the same tool may not be appropriate or most effective for meeting all four challenges. We began by organizing four different teams, each of which would focus on one of the design challenges. We then looked for synergies and overlap among the resulting tools. To establish the conditions within which each design challenge could be addressed, a set of design principles defined the requirements for any solution developed through the design process. See the Design Principles for LCAP Redesign Prototypes text box for a list of these principles.

The Design Process

In November 2016, each design challenge was assigned to a team composed of a broad range of stakeholders (including district leaders, parents, advocates, researchers, students, and funders selected to reflect the geographic and demographic diversity of the state) in a 3-day design sprint with the goal of developing a prototype that addressed their challenge. Each team received guidance from a design brief that articulated the scope of the design challenge including setting parameters and explicit design specifications for the work. The design briefs posed and answered these key questions:

- What design challenge is being addressed by the project?
- What are the characteristics of a good solution or response to the design challenge? What metric will be used to assess this?
- Why does this matter and to whom? Who is the "user" the team is designing for?
- How big is this project? What is within the scope? What is outside the scope of the project?
- What is the deadline? What are our time constraints?
- Who will conduct the facilitation?
- What are the key questions the team will need to consider? Where should the team look for data to answer the questions?

In the **Discovery** phase, participants reviewed summaries of the research on current LCAP contexts and interviewed at least one other LCAP user from their own professional network prior to attending the meeting. During the meeting itself, each team interviewed two LCAP users—selected from the members of their design team—about their specific experience with the design challenge. During the **Interpretation** phase, the teams summarized what they learned from the discovery

Design Principles for LCAP Redesign Prototypes

As design teams set out to develop prototypes to address their design challenge, a set of design principles established the parameters for their work. According to these principles, each prototype had to:

- Promote better and more equitable outcomes for kids;
- Promote local control;
- Be easily understandable, actionable, and consumable to a layperson;
- Promote focus and prioritization;
- Be feasible; and
- Be scalable.

phase and identified major themes to guide their solution development process. After this phase, they started to "**Ideate**," or brainstorm possible solutions to their design challenge, ultimately narrowing their focus to one idea for prototyping. In the **Prototype** phase, the teams worked together to flesh out their idea, developing a prototype or draft solution to their design challenge. During the **Feedback** phase, members from each team rotated to visit the other three teams, learn about their prototypes, and provide feedback. Each team then reconvened to summarize the feedback they received from the other design teams and prioritized it for consideration during the **Refine** phase.

This final phase enabled the design teams to address the feedback they had received and to advance coherence by creating prototypes that would ideally work in concert to support a comprehensive system. The design sprint ended with each team sharing a "final" prototype solution to the initial challenge.

Potential Solutions to LCAP Shortcomings

The final products of the 3-day design sprint were a set of four prototypes intended to address the design challenges that drove the process. Each of the four ideas seeks to solve a specific LCAP problem and can stand on its own. However, collectively these tools seek to satisfy a range of goals that the current LCAP insufficiently achieves. The design process ideally produced a set of tools that will work together to better meet the spirit and intentions of LCFF.

We summarize each prototype briefly. For illustrative purposes, see the detailed description of the prototype from Design Challenge 3 in the A Prototype for Creating Transparency of District Plans box on pages 10 and 11.

Prototype 1: A Process for Meaningful Stakeholder Engagement

The first design team responded to this question: How do we engage local stakeholders (inside and outside the local education agency [LEA]) in meaningful planning and budgeting? Meaningful engagement has not traditionally been a hallmark of the way districts do business, and responses to LCFF regulations reveal an education system early in the learning curve. In particular, engagement efforts have tended to rely on districtwide LCAP community meetings that typically attract the same (generally small) subset of stakeholders over and over rather than engaging a broader constituency. In addition, connections between stakeholder input and district plans are difficult to identify within the current LCAP structure. In response to these problems, the team developed an engagement process prototype geared toward meeting the needs of a user group of parents, teachers, and other community members.

The design team recognized that for most of a district's stakeholders-and especially for students and their families-the strongest connection to education is through the school. The design team therefore crafted an iterative process that focuses on school-level planning and explicitly addresses the interaction between district and site plans both in the development and implementation phases of the plan. A district would review systemwide data to inform its overall strategic plan while the site community reviews school data and sets goals, developing strategies and priorities consistent with the overall district vision. Through an iterative process, education leaders would have an opportunity to structure two-way conversations with parents and other community members in the ways most relevant to them, as well as to pursue

coherence between the overall district vision and the manifestation of that vision at the site level.

Prototype 2: A Tool to Facilitate Strategic District Planning

The second design team focused on a web-based tool to support the local planning process: How can LEAs most effectively align budgets and strategic priorities? Although some evidence suggests that LCFF has prompted increased communication and collaboration between financial and academic leaders within LEAs, LCAPs are not organized in a way that communicates the alignment of spending plans with instructional and other priorities to promote better outcomes for students. Rather, endless tables often show long lists of staff positions and strategies with little to no obvious connective threads supporting a broader district vision for instruction and student learning. To support clearer connectedness, this team developed its prototype tool for a user group of district leaders.

The prototype for Design Challenge 2 is a Webbased application to align budgeting, strategies prioritized by the system, and metrics to measure that progress. Senior leaders in a district would use the tool during the budget development process by leveraging academic, fiscal, and demographic data to make better and more informed decisions about investments and their priorities. Such a tool could show costs of different strategies in real time and help visualize the trade-offs among them. It would also allow comparisons among schools, subgroups of students, and other divisions to illustrate how district decisions reflect local priorities and advance equity goals. By embedding these capabilities in an interactive Web-based tool, this prototype could advance districts' abilities to plan strategically rather than fit a set of thinly related approaches

within the confines of a static template. It could facilitate conversations among business and programmatic leaders about the relative strengths and financial impacts of different planning decisions. It could also prepare district leaders to speak more knowledgably with the public about the rationale behind the various details of a district's plan.

Prototype 3: A Tool to Provide Transparency in Planning and Budgeting

The third design team explored issues of communication by addressing this question: *How do we create a product that provides transparency around planning and budgeting in a coherent manner*? The current LCAP is opaque and inaccessible to a layperson, posing an obstacle for stakeholders of all kinds to truly understand district plans. The combination of educational jargon and an impenetrable document format make it impossible for all but the most sophisticated reader to really understand what is inside. In response to this challenge, the team designed a prototype to reach users from a district's local community—including parents, teachers, advocacy groups, and others interested in understanding a district's plans.

The prototype from this design team is also a Web-based application—one based on the same underlying data system that fuels the prototype from Design Challenge 2. Through this application, LEAs could communicate their plans in an accessible, transparent, and coherent manner. Such an application would emphasize the big picture of LEA plans, beginning with the overriding district story and the vision that drives its decisions. It would enable users to drill down to whatever level of detail they desire—including links between goals, strategies, resource allocation, and outcomes—through a simple click of a button linking all pieces to one another. Please see the text box on pages 10 and 11 for an illustrated description of this prototype.

Prototype 4: A Process for Demonstrating Compliance With the Intent of LCFF

The process of reviewing and approving LEA LCAPs has attracted criticism for being overly compliance oriented and focused on the minutia of state requirements rather than plan quality and student outcomes. As a result, many LEAs have spent more time filling out the form than engaging in a process of effective strategic planning and budgeting. Design team 4 focused its work on shifting this dynamic by asking this question: *How can we effectively demonstrate that LEAs have complied with the intent of LCFF?* The resulting prototype sought to address users like policymakers and advocates who hold districts accountable for their strategic and financial decisions and outcomes.

Instead of using a static template—the LCAP itself—the team proposed that districts build their strategic plans and budgets from a set of design principles for addressing plan quality. (See the Design Principles for Assessing Plan Quality text box.) Districts could build their plans through various online tools and use a range of mediums from text to video. Rather than determining whether districts had filled out the right boxes in the stateapproved way, the approval of a district plan would depend on whether they had addressed the design principles. To ensure the reliability and validity of this review process, the state would authorize a set of reviewers to analyze the plans and provide support for addressing any gaps or shortcomings. These reviewers could be drawn from county offices, universities, nonprofits, and even other LEAs. By focusing on adherence to the overall principles and not the specific requirements of a static document, this new approach would pave the way for a more useful planning process focused on an LEA's true strategic priorities. Reviewer feedback would also focus on supporting a district's ongoing efforts to improve their results in the state priority areas.

In addition, the team developed a mechanism for aligning this review of plan quality with LEA progress in state priority areas. Specifically, they developed a grid with plan quality on one axis and outcomes on the other axis. This grid would allow reviewers to locate the LEAs with the poorest outcomes and the lowest plan quality and focus their efforts on them. With more than 1,000 districts and another 1,000

Design Principles for Assessing Plan Quality

Design Team 4 developed the following draft principles for assessing a district's plan quality:

- Promotes and reflects meaningful engagement with a broad set of stakeholders.
- Promotes focus and prioritization on the targeted groups: Are the activities likely to promote better outcomes for specific subgroups of students?
- Is measurable and actionable: Do we see cycles of continuous improvement in place?
- Is budget aligned: Are the actions funded appropriately?
- Is easily understandable.

charter schools, this process would result in the most effective and efficient use of the expert reviewers' time. In addition, districts with quality plans and high outcomes could have their plans approved for multiple years without having to revise it annually.

A Path Forward: What Happens Next

The four prototypes developed using the design approach show the potential for more effective pathways to meeting LCFF's goals. They also speak to the power of the design process as a vehicle for experimentation and innovation. However, the work of the design teams is incomplete. Consistent with the principles of design, the prototypes themselves require testing and refinement in order to finalize these new solutions. Moreover, state regulations still require that all districts use the existing LCAP template to demonstrate their alignment with the expectations of LCFF.

Testing and Refining the Prototypes

To advance this process and the ideas that emerged from it, a team from the California Collaborative, Pivot Learning, and WestEd has engaged in conversation with the California Collaborative for Educational Excellence (CCEE) to pursue some of the prototype refinement in the CCEE's "test kitchen," a new structure intended to serve as a breeding ground for experimentation and innovation. We are actively recruiting districts to move the prototypes forward and welcome the opportunity to work with and learn from others as well. We acknowledge that asking districts to try something new while responding to the requirements of the existing LCAP creates a burden that will be prohibitive for many. Legislative action that creates waivers for a small set of districts could clear space for the innovation needed to maximize the effectiveness of LCFF.

Considering a Different Solution to Policy Problems

Beyond these specific prototypes, we suggest that state education leaders embrace the design process as a solution to policy problems more generally. Too often, a conglomeration of interest groups seeking to advance their own priorities produce solutions that achieve compromise, but only faintly reflect the needs of the individuals and groups that the policies affect. The design process brings multiple perspectives to the table to leverage a group's collective expertise, but it does so in a way that understands and directly addresses the needs of the end user. By considering policies that encourage experimenting with bottom-up solutions to key problems in K-12 education, California policymakers can accelerate the learning process for all involved and can more effectively develop and test interventions that achieve their intended purposes.

A Prototype for Creating Transparency of District Plans

The third design team developed a prototype to address issues of communication. Although designers of the LCAP strived to create transparency by including budgeting and planning information in the template, the resulting documents have become overwhelming and indecipherable. Documents that stretch to hundreds of pages in length and live in elusive corners of district websites have done more to obscure district plans than to illuminate them.



The design team therefore sought to facilitate communication through a format already familiar to families and other stakeholder groups, a Web-based application. This application would be accessible from computers, tablets, and smartphones. It would provide clear links across goals, activities, expenditures, and outcomes. It would also recognize that different users have different needs regarding the specificity of the information they seek. The tool would highlight the most important aspects of a district's story while enabling users to drill down to the level of detail most relevant to them. Finally, it could build from the same data platform that underlies the prototype from Design Team 2, allowing for a more efficient use of investments.

Welcome screen: Users would begin by accessing a welcome screen that introduces them to the district. A video would tell the district's story, highlighting the overall vision that drives its work. A text box at the bottom of the screen would do the same through a general overview of the district's mission, vision, and values.

This screen offers two features to help users access information most valuable to them. The first, a "First-Time User" button, directs the user to a brief tutorial about how to understand and use the application. The second, a "School View" button, responds to the understanding that most stakeholders interact with their district through a specific school. By clicking on this button, users can access the same information available for the district overall, but one that emphasizes the activities, expenditures, and outcomes at an individual school site.

The welcome screen provides users with two avenues into more detailed information about the district.

Our Budget: This button provides an overview of a district's revenue sources. This overview includes the base, supplemental, and concentration grants that flow from the state, as well as federal and other local sources of funding that shape spending opportunities. Just as importantly, Our Budget shows budget allocations, including financial commitments such as health care benefits and pension contributions, as well as expenses like facilities maintenance that may not tie directly to a specific district goal. In this way, users can better understand the constraints on local decision making as well as the areas in which districts can make meaningful resource allocation decisions.

Our Plan: Through this link, a user first sees the goals that drive a district's work. For this example, the screenshot at the bottom of page 10 lists four generic goals that might drive district action. In real life, these goals should be consistent with the overall mission and vision laid out on the welcome screen of the application. Critically, they frame all information about a district's plan around its local priorities, not around the categories or requirements of an external template. This screen includes a link to the rationale behind the goals. With this link, users have access to information currently obscured or missing in the current LCAP, the reasons why a district is pursuing a set of goals. This link is one of multiple opportunities for districts to reference the way in which community engagement work has informed their overall direction.

District Goals: Users of the application then have an opportunity to click on any one of the goals to learn more about the strategies, resource allocation decisions, and outcomes associated with the goal. This page begins with the language of the goal itself, followed by the specific outcomes the district is using to track progress toward the goal—with information about historical trends and the target for the upcoming school year. Although the illustration uses only one graph, the dynamic nature of the tool would enable districts to display multiple outcomes, including breakdowns for subgroup performance. Districts can update these data throughout the year as new information becomes available. Finally, the page would list the specific actions through which the district seeks to achieve the goal.

Specific Strategies: Within each goal, users have an opportunity to drill down to learn more about the specific strategies that the district has designed to achieve a particular goal. This page begins with a description of what the activity entails, the reason the district has selected this particular activity, and the rationale for how it should help achieve the overall goal. As with the Our Plan page, districts can describe the research base, community input, or other motivations that have driven them to pursue a particular course of action—information that is difficult or impossible to track in the current LCAP. Users can see the specific budget allocations designed to support a strategy. Like outcome data, districts can provide updates throughout the year about expenditures to date. In the inevitable case of midyear adjustments, these updates can include the rationale for modifying original budget projections.

Generic USD Our Plan Goal 1

Goal 1. Student achievement All students will excel in reading, writing, and math.

Progress and Targets



Action to Achieve Goal 1

- 1. 3rd grade reading intervention
- 2. Training on new standards

Generic USD Our Plan Goal 1 Strat. 1

Goal 1. Student achievement

Strategy 1: 3rd Grade Reading Intervention

DESCRIPTION

Language describing what the activity entails, the reason the activity was selected , and the rationale for how it should help achieve the overall goal

BUDGET

Online curriculum program\$20,00Reading intervention specialists (7.5 FTE)\$450,00

ACTUAL EXPENSES THROUGH FEBRUARY 2017 Online curriculum program \$20,00 Reading intervention specialists (2.5 FTE) \$150,00

Throughout the tool, opportunities exist to link information from various elements of a district plan. Further refinement in close collaboration with a local district and other invested stakeholders can help make this early prototype a more powerful tool for communicating about district plans.

NOTES

 The LCFF statute defines roles and responsibilities for local education agencies (LEAs), which are typically school districts but can include entities like independent charter schools or county offices of education. For the purposes of this brief, we use the terms district and LEA interchangeably.

2. A set of studies released in 2007 and known collectively as *Getting Down to Facts* extensively documented the flaws in California's school governance and finance systems. Among the findings were that a proliferation of categorical funding programs severely restricted districts' abilities to allocate resources according to local needs (e.g., Loeb, Grissom, & Strunk, 2007; Timar, 2006), and despite the good intentions of these programs, California's student outcomes lagged far behind those of other states (Loeb, Bryk, & Hanushek, 2007).

3. Among these purposes are a locally determined planning document, a vehicle for community engagement, a means of aligning local spending with state priorities, a check on how resource allocations will benefit targeted student populations, and a source of accountability for inputs and outcomes.

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