POLICY BRIEF

SEPTEMBER 2015

From Accountability to Actionability:

Making Sense of Multiple Measures in Local Control Accountability Plans

Paul Beach · Michael Thier · Sarah Collins Lench · Matt Coleman, DEd

Educational Policy Improvement Center

www.epiconline.org

INTRODUCTION

Local Control Accountability Plans (LCAPs) represent a promising shift in accountability policy by encouraging districts to develop strategic plans designed to meet local needs. Inherent to the success of LCAPs is the use of multiple measures to describe a district's theory of action and to assess the effectiveness of subsequent implementation efforts. In this policy brief, we review promising practices from California districts and insights from research on multiple measures to provide recommendations that improve how districts generate, present, and use data in their LCAPs. We recommend that districts

1. use multiple measures to develop greater coherence between inputs, processes, and outcomes linked to specific LCAP goals;
2. employ the matrix approach to monitor progress over time and as a communication tool for internal stakeholders; and
3. create infographics and narrative descriptions as a means to communicate critical information to external stakeholders.

This policy brief is the second in a series aiming to support the development and implementation of effective LCAPs aligned with college and career readiness as a district's North Star. [1]

DEFINING MULTIPLE MEASURES

This policy brief is focused on accountability systems that use multiple measures of different constructs (school climate, student engagement, English proficiency, etc.) to assess and report on school quality. Using multiple measures is not new; nearly every state issues school report cards with numerous data points. However, most of these systems hold districts and schools accountable—meaning they judge school quality and attach stakes to punish and reward for quality—exclusively through student outcome measures, most notably standardized tests of basic literacy and numeracy, and in some recent cases, the SAT and ACT. [2] California's revised accountability system is unique as it holds districts and schools accountable to providing adequate inputs (e.g., school facilities) and sound processes (e.g., academic standards implementation) in addition to improving student achievement on traditional outcome measures (e.g., standardized test scores). This new accountability model creates a vast amount of information for districts to organize, manage, and present both internally and externally to stakeholders. Additionally, LCAPs provide space for districts to select a diverse set of outcome measures, beyond standardized test scores. (See Figure 1.)

A. CONDITIONS OF LEARNING:

Basic: degree to which teachers are appropriately assigned and fully credentialed in the subject areas and for the pupils they are teaching; pupils have access to standards-aligned instructional materials and school facilities are maintained in good repair. (Priority 1)

Implementation of State Standards: implementation of academic content and performance standards adopted by the State Board for all pupils, including English learners. (Priority 2)

Course access: pupil enrollment in a broad course of study that includes all subject areas schools are required to offer. (Priority 7)

B. PUPIL OUTCOMES:

Pupil achievement: performance on standardized tests, score on Academic Performance Index, share of pupils that are college and career ready, share of English learners that become English proficient, English learner reclassification rate, share of pupils that pass Advanced Placement exams with 3 or higher, share of pupils determined prepared for college by the Early Assessment Program. (Priority 4)

Other pupil outcomes: pupil outcomes in the subject areas schools are required to offer. (Priority 8)

C. ENGAGEMENT:

Parent involvement: efforts to seek parent input in decision making, promotion of parent participation in programs for unduplicated pupils and special need subgroups. (Priority 3)

Pupil engagement: school attendance rates, chronic absenteeism rates, middle school drop-out rates, high school dropout rates, high school graduations rates. (Priority 5)

School climate: pupil suspension rates, pupil expulsion rates, other local measures including surveys of pupils, parents and teachers on the sense of safety and school connectedness. (Priority 6)

Figure 1. Local Control Accountability Plan state priorities and associated measures.

THE NEED FOR MULTIPLE MEASURES

The use of multiple measures in accountability systems arose from a near-consensus among stakeholders that no single indicator can describe school quality sufficiently or produce the actionable information necessary for improving student outcomes. This consensus emerged in response to the unintended consequences of the No Child Left Behind Act of 2001 (NCLB), which used standardized test scores in reading and mathematics to make high-stakes decisions about perceived school quality. In particular, the singular focus on proficiency in literacy and numeracy has minimized all other student outcomes and led to curriculum narrowing in schools.[3]

It is important to note the differences between LCAPs and the Academic Performance Index (API), which is currently suspended and will not be reinstated in its previous form. The API, used from 1999–2013 to rate and rank order schools, is a score between 200 and 1000 that is calculated from an index of outcome measures, specifically standardized test scores in English-language arts, mathematics, history/social science, and science.[4] The eight state priorities that districts are required to address in LCAPs through multiple measures acknowledges the limitations of NCLB-era accountability and recognizes that assessing school quality goes beyond outcomes to include inputs and process measures. However, districts and schools will not immediately be subject to single score ratings such as the API, in part because the state has no measurement system in place for certain LCAP measures and because the research base demonstrating validity and reliability for these measures is evolving.

The focus of accountability in California has shifted from improving standardized test scores to improving performance relative to 23 additional measures. This shift requires districts to create an entirely new system that effectively addresses all 24 measures (see Figure 1) while also providing stakeholders with useful information. Instead of cataloging and describing every characteristic of effective multiple measure systems—and there are many—we will limit our focus to actionable data. Systems that promote actionability go beyond accountability, creating the conditions necessary to monitor inputs, processes, and outcomes. Creating these conditions allows districts and key stakeholders to have a clear sense of how the various parts of the educational system fit together and how their work relates to the district's overall goals. Districts also need a sense of how they are doing, relative to past performance and future goals. Detailed performance data, combined with a clear theory of action for improving student outcomes, will allow districts and their stakeholders to work together to diagnose problems early and prescribe solutions for immediate action.

RECOMMENDATIONS

Our first recommendation is designed to help districts improve internal coherence by aligning input, process, and outcome measures in LCAPs. Our second recommendation presents an approach for translating LCAP information so all stakeholders can view past and current performance, as well as future expectations. Finally, we describe the methods some districts have used to tell their stories and summarize LCAPs through infographics and narrative descriptions.

The recommendations are illustrated with promising practices from districts that participated in the Orange County Department of Education College and Career Readiness Consortium. The consortium focused on aligning LCAPs to college and career readiness as well as developing plans that use multiple measures to promote internal coherence. The examples in this policy brief are based on districts' revised LCAPs for 2015–16.

RECOMMENDATION #1: Align Input, Process, and Outcome Measures

Entitled "Basic," the first state priority establishes a clear foundation for success. Students who attend schools with poor facilities, are taught by unqualified teachers,[5] and lack access to quality textbooks, instructional materials, and technology[6] are less likely to succeed academically when compared to students in schools with adequate inputs. Measures of the educational process such as access to (priority 7) and implementation of rigorous and rich curricula (priority 2), parental involvement (priority 3), school climate (priority 6), and student engagement (priority 5) share importance because processes build off inputs to generate student outcomes. Systematic approaches to school improvement require districts to decipher how inputs, processes, and outcomes can align (see Figure 2).

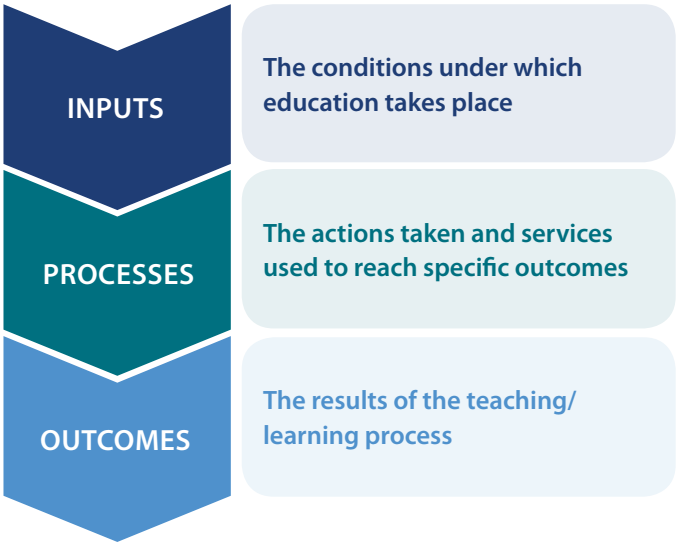
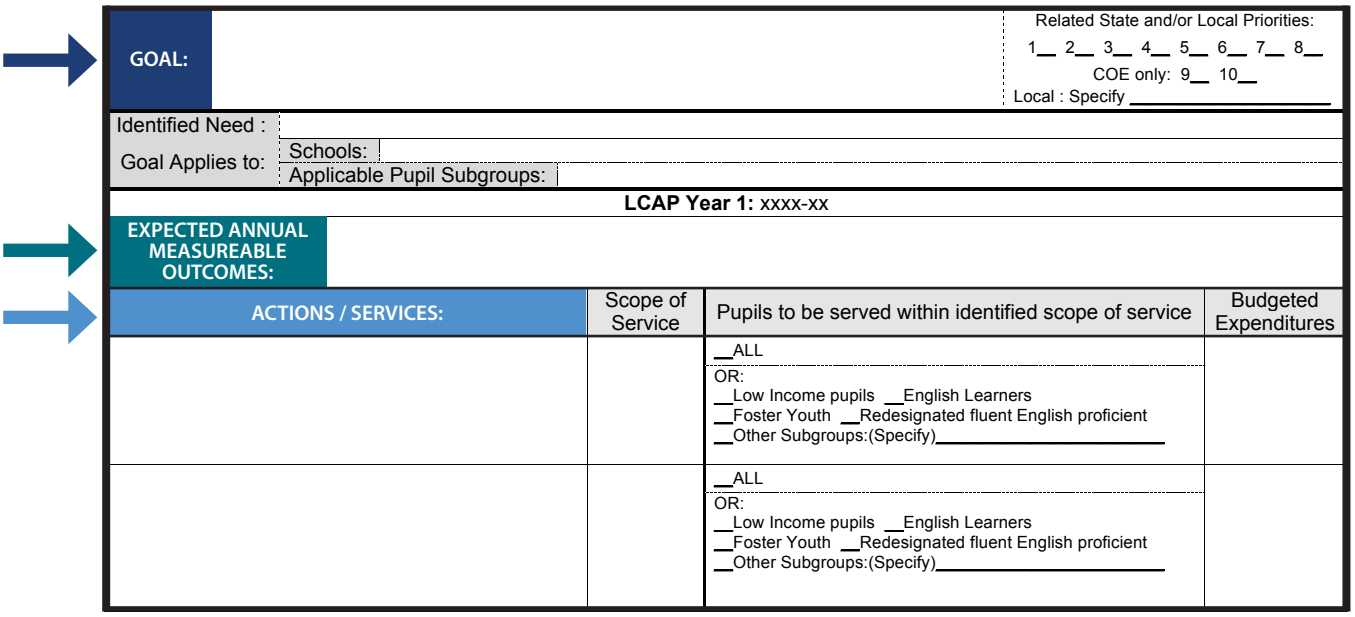


Figure 2. Input, process, and outcome measures.

Aligning inputs, processes, and outcomes is not a simple exercise. By design, LCAPs require districts to identify

- overall *goals* aligned to state priorities,
- *expected annual measurable outcomes* related to goals, and
- *actions* and *services* used to achieve outcomes (see Figure 3).



GOAL:

Related State and/or Local Priorities:
1__ 2__ 3__ 4__ 5__ 6__ 7__ 8__
COE only: 9__ 10__
Local : Specify _____

Identified Need :

Goal Applies to: Schools: | Applicable Pupil Subgroups:

LCAP Year 1: xxxx-xx

EXPECTED ANNUAL MEASUREABLE OUTCOMES:

ACTIONS / SERVICES:	Scope of Service	Pupils to be served within identified scope of service	Budgeted Expenditures
		__ALL OR: __Low Income pupils __English Learners __Foster Youth __Redesignated fluent English proficient __Other Subgroups:(Specify)_____	
		__ALL OR: __Low Income pupils __English Learners __Foster Youth __Redesignated fluent English proficient __Other Subgroups:(Specify)_____	

Figure 3. Section 2 of LCAPs.

One challenge in understanding the relations between multiple measures is a tendency in some districts to identify multiple expected annual measurable outcomes and lump numerous actions and services together under one goal. This approach does not show how the measures relate to one another. Separating inputs from processes within the actions and services section is the first step toward putting the full power of multiple measures into action.

Attaching common symbols (e.g., A, B, C) to aligned inputs, processes, and outcomes is one simple method to help districts present information in a way that allows stakeholders to detect a district's theory of action for achieving overarching goals. Newport Mesa Unified School District in Orange County provides an example in Goal 2 of its 2015/2016 LCAP,[7] shown in Figure 4.

Newport Mesa attached six distinct categories of expected annual measurable outcomes to this goal. The fourth category—Course-Taking Behavior—is signified by the letter D in Figure 4. The district linked specific actions and services to its expected annual measureable outcome, showing the inputs and processes the district will prioritize (see Figure 5).

For instance, Newport Mesa district officials plan to institute a schoolwide credit recovery program, a process we suspect they will use to increase the percentage of students who complete the a–g subject requirements.

GOAL 2:	College and Career Readiness: Prepare grades 6-12 students to succeed in college and careers.
	• **Increase CAHSEE pass rates for unduplicated count students.** An analysis of CAHSEE pass rate data indicated that unduplicated students (combination of low-income, EL, and foster students) in 2012-2013 scored 13 percentage points below all other students in ELA and 18 percentage points below in math. Data also indicated that increasing the pass rate is correlated with increased overall academic achievement, thus increasing college and career readiness.
LCAP Year 1: 2015-2016	
Expected Annual Measureable Outcomes:	**A. College Entrance Exams** • **SAT/ACT:** By fall 2015 establish a baseline number of high school students who have taken the SAT and/or ACT one or more times each school year. • **PSAT:** By June 2016 maintain at least the same participation of grades 8 and 10 students as the number of participants in 2014-2015. **B. Advanced Coursework** • **AP/IB Enrollment:** By June 2016 increase the number of comprehensive high school students who enroll in Advanced Placement/International Baccalaureate (AP/IB) courses by at least 6%, as measured by enrollment lists. • **AP/IB Pass Rates:** By June 2016 increase the number of students who meet the minimum passing score on the AP/IB tests by at least 5%, as measured by the California Department of Education (CDE). **C. Innovative Measures** • **Seal of Biliteracy:** By June 2016 increase the number of students who receive the California State Seal of Biliteracy from 124 to at least 150, as measured by the CDE. **D. Course-Taking Behavior** • **University of California (UC) and California State University (CSU) A-G Completion:** By June 2016 increase the percentage of graduating seniors who complete a-g subject requirements from 51.8% to at least 55%, as measured by the CDE. • **Career Course Pathways:** By June 2016 increase the percentage of students completing career course pathways by at least 3%, as measured by pathway completion lists. **E. Career Preparedness Assessments** • **Career Survey:** By June 2016 all grade 6, 8, and 10 students will complete the Naviance (online career/college planning tool) career survey, as measured by completion lists. **F. College and Career Planning** • **Academic Plans:** By June 2016 every student in grades 6-12 will create a secondary academic plan focused on college.

Figure 4. Newport Mesa Unified School District's LCAP (page 29).

D. Course-Taking Behavior • Advanced Via Individual Determination (AVID) district coordinator • AVID dues and memberships • AVID consultant to train coordinator	 $4,000 $17,425 $6,300	All students at all high schools
D. Course-Taking Behavior • School-wide initiatives: High School Credit Recovery 3.3 FTE, Life Skills 1.0 FTE, Music 0.91 FTE, Reading 2.4 FTE, Art 0.33 FTE, Health Assistant 0.5 FTE	 $850,000	All low-income and foster students at all high schools
D. Course-Taking Behavior • CCSS site support: Embedded coaches from innovate ED for trainer coaching • CCSS site support: Embedded coaches training extra duty • CCSS site support: Embedded coaches substitutes	 $67,500 $15,000 $20,000	All students at all middle and high schools

Figure 5. Newport Mesa Unified School District's LCAP (page 31).

The example in Figure 6, produced by the authors of this policy brief, takes Newport Mesa's method a step further by separating out inputs and processes within the actions/services section. Consider a district that has the goal of increasing the number of students who complete an advanced course pathway and earn an industry certification or college credit. The expected annual measureable outcomes are the percentages of students who

(a) complete an integrated course pathway and earn an industry certification or college credit;[8]

(b) complete two Career and Technical Education (CTE) course pathways and earn at least one industry certification;[9]

(c) score sufficiently[10] on two or more Advanced Placement (AP) or International Baccalaureate (IB) exams; or

(d) complete two dual enrollment courses and earn college credit.

Many inputs and processes need to be established in order to reach the overall goal of increasing the percentage of advanced course pathway completers, some of which are described in Figure 6. It is important to keep in mind the percentage of students completing an advanced course pathway will not increase significantly in just one year. Establishing the requisite structures and systems is the first step to ensuring any sustainable increase in advanced course pathway completers.

Local communities with a similar goal might have different needs that are not reflected in Figure 6, which is not an exhaustive list. Additionally, there are few actions and services that do not interact with, or influence, each other.[11] For instance, increasing the percentage of students who complete an advanced course pathway can have positive effects such as promoting a school climate that supports college and career readiness. On the other hand, investing in specific course pathways might take resources away from other priorities, such as training in the Common Core State Standards for teachers.

GOAL:	Increasing the percentage of students who complete an advanced course pathway and earn an industry certification or college credit (or eligibility through qualifying exam scores)	
EXPECTED ANNUAL MEASUREABLE OUTCOMES:	**[A]** Integrated Course Pathway	(1) completing a CTE course pathway and earning an industry certification, *and* (2) completing an AP or IB course and scoring 3 or higher on an AP exam or 4 or higher on an IB exam
	[B] Career pathway	completing two CTE course pathways and earning at least one industry certification
	[C] University pathway	completing two or more AP/IB courses and scoring 3 or higher on two AP exams or 4 or higher on two IB exams
	[D] Postsecondary pathway	completing two dual enrollment courses and earning college credit

ACTIONS/SERVICES:	Related Expected Annual Measureable Outcome
Process Measures	
Establish formal relationships with local businesses	[A] [B]
Establish formal relationships with Regional Occupational Centers and Programs (ROCPs)	[A] [B]
Establish formal relationships with local postsecondary institutions	[A] [D]
Explicitly focus instruction on students' Deeper Learning skills, specifically critical thinking, collaboration, communication, and learning how to learn	[A] [B] [C] [D]
Explicitly focus instruction on students key transitional skills and knowledge, specifically the cultural norms across various workplaces and two- and four-year postsecondary institutions	[A] [B] [C] [D]
Input Measures	
Create an internal governance body that sets policies for (1) awarding industry certifications, (2) recognizing CTE course pathways, and (3) aligning dual enrollment and high school course credits	[A] [B] [D]
Increase the number of teachers trained to teach CTE courses	[A] [B]
Increase the number of teachers in AP training programs	[A] [C]
Establish an IB Diploma Programme	[A] [C]
Increase the number of teachers in IB training programs	[A] [C]
Create a direct reimbursement program for AP/IB exam fees for qualifying students	[A] [C]
Create policies for transporting students to and from postsecondary institutions	[A] [D]

Figure 6: Linking inputs, processes, and outcomes to increase the percentage of students who complete an advanced course pathway.

RECOMMENDATION #2: Tell Your Past, Present, and Future Stories

Following Recommendation #1 will improve coherency and transparency while producing information that stakeholders can use to reach overarching goals. However, districts still need to present understandable information on past and current performance relative to the expectations of local communities.

The Matrix Approach

We endorse the use of matrices to describe what districts do well and where they can improve. The matrix approach is a cornerstone in recent thinking about multiple measures. Using matrices for accountability stems from the recognition that no single number calculated from an index of measures can provide the type of detailed information necessary for stakeholders to improve student outcomes. Single number or letter-rating systems, such as the API or A–F report cards, have traditionally held value among people seeking a simple answer to a complex question: What makes schools good or bad? By contrast, a district can use a matrix to set levels for current performance *(low, mid-range, high)* and trend data *(declining, static, improving)*.[12] Instead of simply presenting a flat number such as 65% of students graduated on time, a matrix supplements this percentage with *low*, signifying that the district and its stakeholders are not satisfied with the current graduation rate and *declining* to show that the graduation rate fell from the prior year. In doing so, a district can identify opportunities to improve, which are lost in a single letter grade or indexed number.

Combining a matrix with Recommendation #1 will create a system that satisfies the regulatory requirements placed upon districts and also produce a coherent set of information that a variety of stakeholders can use. A matrix suits LCAP development and can become an interactive, real-time data dashboard for external and internal use. Also, a matrix can exist exclusively in an LCAP as it is presented here. We recommend developing a multiple-measure matrix with the following characteristics:

- goals and measures aligned to a district's definition of college and career readiness;
- explicit relations between input, process, and outcome measures; and
- clear articulation of what a district does well alongside its opportunities for improvement (see Figure 7).

Of the three characteristics, the latter two are the mechanics that create coherency and produce the conditions necessary for actionability. However, the first characteristic—aligning goals and measures to a district's definition of college and career readiness—might be the most important. Often, process measures are where districts actualize their theory of action for achieving student outcomes. The fourth process measure in Figure 7 shows teachers, parents, and community members that this district's theory for increasing the percentage of advanced course pathway completers relies on cultivating students' Deeper Learning skills.[13] At the heart of Deeper Learning is the notion that engaged students apply the knowledge from each course to past and future courses in ways that allow them to build new knowledge and work toward their aspirations.

		Metric	Target	Score	Performance	Trend
GOAL						
	Increasing the percentage of students who complete an advanced course pathway and earn an industry certification or college credit (or eligibility through qualifying exam scores)	% completers	90%	24%	Low	Static
EXPECTED ANNUAL MEASUREABLE OUTCOMES						
[A]	Integrated pathway: (1) completing a CTE course pathway and earning an industry certification *and* (2) completing an AP/IB course and scoring ≥ 3 on an AP exam or ≥ 4 on an IB exam	% completers	30%	5%	Low	Static
[B]	Career pathway: completing two CTE course pathways and earning at least one industry certification	% completers	20%	7%	Low	Improving
[C]	University pathway: completing two or more AP/IB courses and scoring ≥ 3 on two AP exams or ≥ 4 on two IB exams	% completers	20%	5%	Low	Static
[D]	Postsecondary pathway: completing two dual enrollment courses and earning college credit	% completers	20%	7%	Low	Improving
PROCESSES						
[A] [B]	Establish formal relationships with local businesses	student – relationship ratio	40	90	Mid-range	Improving
[A] [B]	Establish formal relationships with Regional Occupational Centers and Programs (ROCPs)	Yes/No	Yes	Yes	High	N/A
[A] [D]	Establish formal relationships with local postsecondary institutions	% of institutions within 50 miles	75%	50%	Mid-range	Improving
[A] [B] [C] [D]	Explicitly focus instruction on students' Deeper Learning skills, specifically critical thinking, collaboration, communication, and learning how to learn	student – teacher ratio	30	50	Mid-range	Improving
[A] [B] [C] [D]	Explicitly focus instruction on students' key transitional skills and knowledge, specifically the cultural norms across various workplaces and two- and four- year postsecondary institutions	student – teacher ratio	30	50	Mid-range	Improving
INPUTS						
[A] [B] [D]	Create an internal governance body that sets policies for (1) awarding industry certifications, (2) recognizing CTE course pathways, and (3) aligning dual enrollment and high school course credits	Policies set	3	3	High	Improving
[A] [B]	Increase the number of teachers trained to teach CTE courses	student – teacher ratio	30	75	Mid-range	Improving
[A] [C]	Increase the number of teachers in AP training programs	student – teacher ratio	30	150	Low	Static
[A] [C]	Establish an IB Diploma Programme	Yes/No	Yes	Yes	High	N/A
[A] [C]	Increase the number of teachers in IB training programs	student – teacher ratio	30	90	Mid-range	Improving
[A] [C]	Create a direct reimbursement program for AP/IB exam fees for qualifying students	Yes/No	Yes	No	Low	N/A
[A] [D]	Create policies for transporting students to and from postsecondary institutions	Yes/No	Yes	Yes	High	N/A

Figure 7: Example of matrix approach.

Successfully completing an advanced course pathway requires students to understand how past courses provide the foundation for future courses and how earning an industry certification or college credit can be used as currency in multiple postsecondary pathways.

A matrix also presents an opportunity for a district to establish college and career readiness targets that reflect community-specific assets and needs. For instance, the outcome rows in Figure 7 show a district with a healthy balance of students who aspire to enter a CTE field and four-year and two-year postsecondary institutions, as well as recognizing that some students might not have made definitive postsecondary plans. This district recognizes the diversity of aspirations by placing relatively equal value on each of the advanced course pathways. Rather than writing off students who are unsure of their aspirations, this district pushes such students toward the integrated course pathway, which leaves open many postsecondary options. Furthermore, by setting the completion target of 90%, this district recognizes that at least 10% of its students might aspire to attend the military, join the Peace Corps, or have other postsecondary plans not captured by these advanced course pathways. If this district instead knew that most students, but not all, aspired to enter four-year universities immediately after high school, the targets under [A], [B], [C], and [D] might be distributed as 10%, 10%, 60%, and 10%. Ultimately, local communities have the option to incentivize certain advanced course pathways without privileging one over the other.

Producing data for the Score column that correspond to the Performance and Trend ratings can involve many different types of calculations depending on the measure. In our example, the score for the overall goal is simply the aggregated percentage of students who completed at least one advanced course pathway. Scores for the expected annual measurable outcomes reflect the percentage of students within the graduation cohort who completed one specific advanced course pathway. Note that districts can choose to double-, triple-, or quadruple-count students who complete multiple pathways or choose to count students toward only one pathway. We counted students only once.

Measuring inputs and processes is slightly more challenging. For the first process measure—establishing formal relationships with local businesses—a district could target a ratio of relationships based upon the number of students (e.g., 40 students per relationship). The same method could apply to the other two input and process measures relative to AP and IB teacher training (see Figure 7). Similarly, certain measures may be constrained by available resources. For instance, a district might set the target of establishing dual enrollment agreements with 75% (or three) of the four postsecondary institutions within 50 miles. Finally, other measures, such as establishing an IB Diploma Programme could be a simple Yes or No.

Performance metrics (e.g., low, mid-range, or high) should correspond to scoring thresholds set for each measure. In this example, we set the following thresholds:

- **Low:** 0-25% of graduating cohort completed at least one advanced course pathway,
- **Mid-range:** 26-75% of graduating cohort completed at least one advanced course pathway, and
- **High:** 76-100% of graduating cohort completed at least one advanced course pathway.

Trend scores simply correspond to the previous year's performance (except for measures with Yes/No scores). Districts can *decline* or *improve* performance, or remain the same (i.e., *static*). There is no uniform or correct method for setting targets, creating scoring rubrics, or establishing thresholds for multiple measures. At the very least, the contents of the matrix should reflect district and community expectations for schools and students.

Beyond setting targets and establishing scoring rubrics, a matrix allows all stakeholders to identify clear opportunities for improvement. The district in this example is not faring well on the university pathway outcome. However, the matrix shows that there are clear inputs and processes the district can improve upon to boost the percentage of students completing AP/IB courses and earning college credit eligibility through qualifying exam scores. Providing AP training to more teachers, creating a direct reimbursement system for students who cannot afford to pay for exam fees, and focusing instruction on Deeper Learning skills are some examples of such inputs and processes.

Achieving outcomes should not be expected until a strong foundation of inputs is established and effective processes are implemented. The district in this example has made significant progress on the input and process measures. However, since this district is on the front edge of work to increase advanced course pathway completers, the targeted outcomes have yet to be reached. This may suggest that this district is making progress as measured by what some call the trailing indicators, and that the desired outcomes, or leading indicators, will be met soon. If all the targets for the input and process measures have been met, yet the outcomes are not changing, districts should consider reevaluating their theory of action for reaching the overarching goal.

The matrix approach reflects a shift in traditional thinking around accountability, represented most recently in California by the API. The theory underlying API-style accountability is that when faced with potential punitive action, districts and schools will use the results from end-of-the-year tests to target instructional improvements that lead to better test scores in the following year. California's new approach to accountability seeks to shift focus from improving narrowly defined outcomes to improving entire systems through multiple measures. The Local Control Funding Formula (LCFF) provides districts with flexibility in how state allocated funds are spent and distributes additional funds to districts with high proportions

of disadvantaged students. LCAPs are the accountability mechanism used to ensure that these resource investments are used to increase performance relative to specific goals aligned to state priorities. The challenge with this type of system is making sense out of all the information districts are required to address in LCAPs. The matrix is an approach that allows districts to catalog multiple measures in a way that gives stakeholders a more holistic picture about what schools are doing well and where they need to improve. At the same time, the matrix approach provides district and school leaders with actionable information by developing coherence between input, process, and outcome measures.

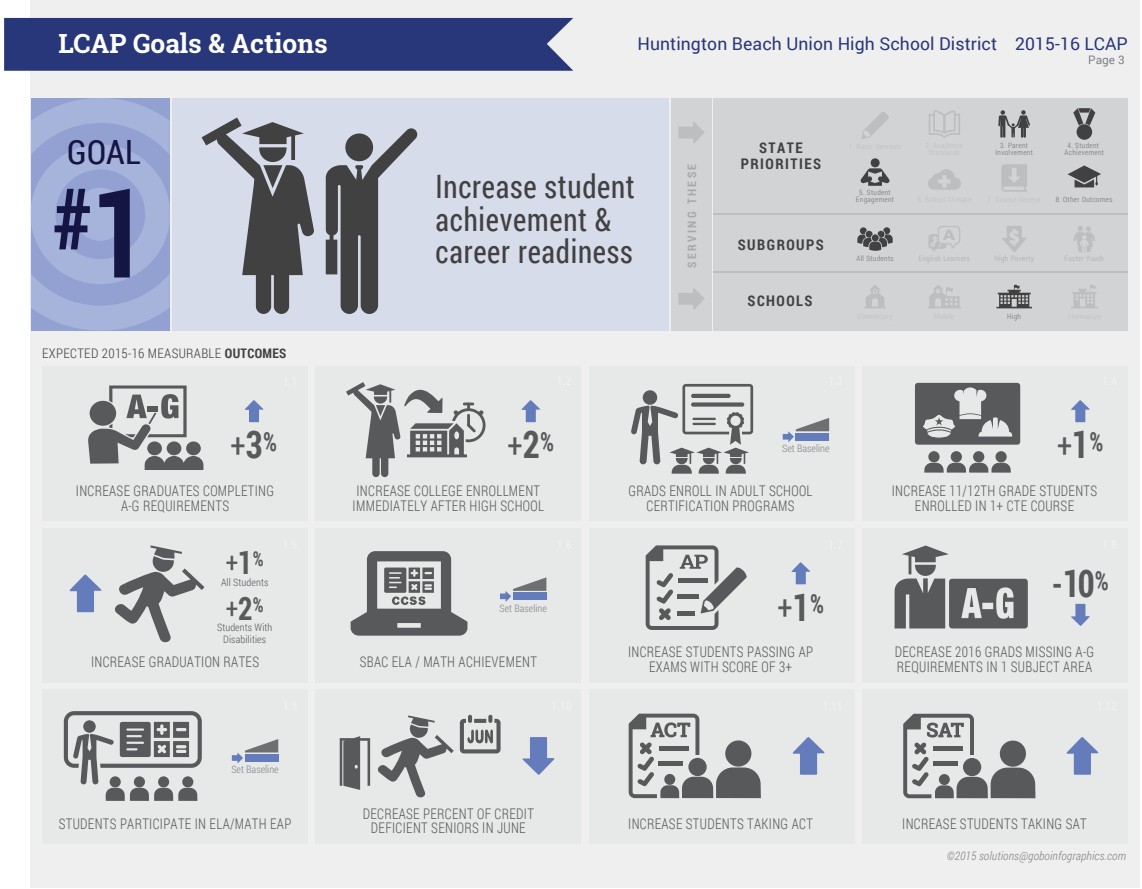
RECOMMENDATION #3: Use Infographics and Narrative Descriptions to Tell Your Story

Implementing Recommendations #1 and #2 can help drive a district toward continuous improvement, but they do not in themselves help a district tell a compelling story. Some districts have developed methods for telling theirs. Huntington Beach Union High School District summarized its LCAP in an infographic (see Figure 8).[14] The district's second overall goal is increasing student achievement and career readiness. The third page of the infographic features arrows and images to help stakeholders interpret the 12 expected measureable outcomes that the district aligned to this goal. The fourth page presents the inputs and processes that will be used to reach these outcomes. This infographic increases stakeholder understanding and lacks the density of an LCAP, but it does not show alignment across inputs, processes, and outcomes and does not provide detailed information on past and current performance.

A narrative description can also help tell the story of a district's LCAP. Again, Huntington Beach provides an example in the executive summary of its 2015/2016 LCAP.[15] The summary provides accessible language to describe an overall goal for college and career readiness, plus the process used to engage stakeholders. A narrative also has the potential to describe why the district selected the goals it did and its policies and practices for achieving those goals. Combining an infographic, a narrative description, and the other adjustments we recommend in this policy brief can produce the actionable information necessary to improve student outcomes, provide a transparent picture of overall performance, and tell a comprehensive and comprehensible story.

CHALLENGES

Our recommendations make LCAPs less about a single judgment of school quality and more about producing actionable information. However, a systems approach to improvement grounded in the use of multiple measures carries its own set of challenges. An infographic is one thing; creating a multiple measure system of accountability that is accessible and usable by a wide range of stakeholders is another entirely. Significant up-front investment will be needed to link multiple databases across schools. This investment



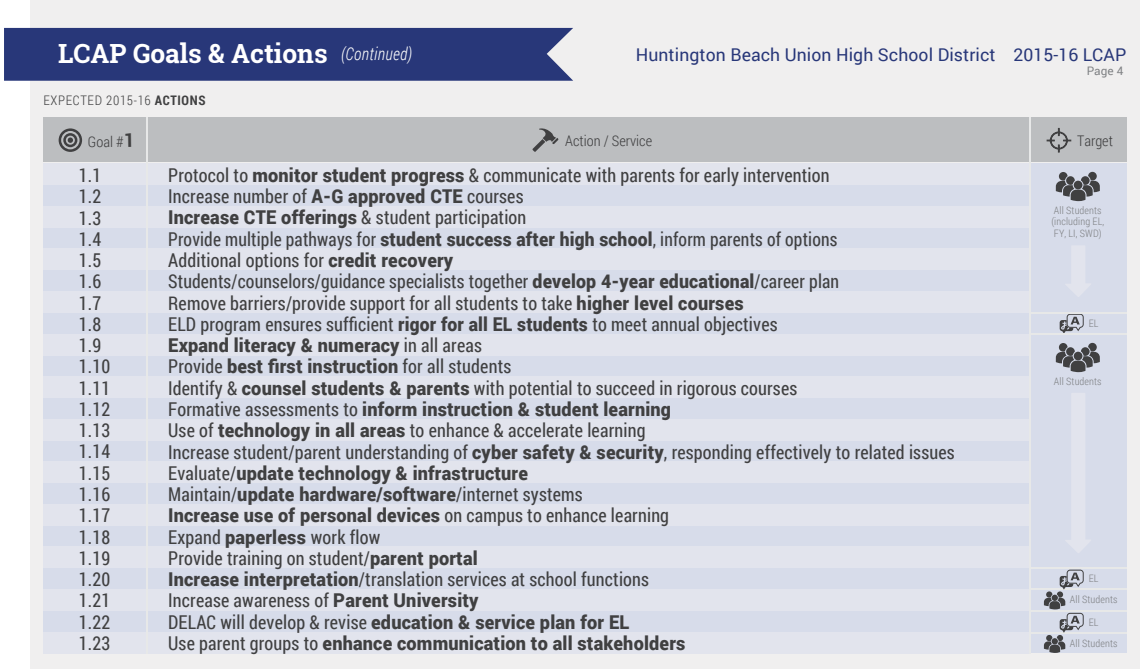


Figure 8. Huntington Beach Union High School District's 2015/2016 infographic (third and fourth pages only).

can take many forms, such as providing professional development, hiring full- or part-time technical experts, or purchasing software packages. Ensuring stakeholders across the system can enter, manage, and use data will likely require a combination of investments.

Another challenge is incentivizing and supporting educators in using information continuously for diagnosing and solving problems of practice. Doing so would place more demands on educators whose time is already stretched thin by other initiatives. Cultivating a culture of trust, belief, and knowledge around data is both an input and a process aligned to producing a system that uses data to improve student outcomes continuously. Training across systems needs to go beyond one-off professional development programs. Establishing weekly supports for teams of educators to discuss collaborative data use might be one step toward creating such a culture. The research community has provided detailed recommendations in these areas and success and failure stories from districts across the U.S.[16]

Another challenge is a lack of evidence on how educators interact with and use data to improve student outcomes, particularly with systems that include input and process measures.[17] Identifying early what works and what does not will be necessary for disseminating best practices—and eliminating counterproductive ones. Furthermore, data cannot be actionable unless they reflect what is being measured. Understanding the technical considerations in choosing multiple measures is a required step toward ensuring that data is created and used responsibly.[18]

CONCLUSION

Understanding how districts and their stakeholders make sense of multiple measures and use data generated from LCAPs to improve the college and career readiness of students might determine the success or failure of California's revised accountability system. However, LCAPs can benefit districts and schools regardless of the accountability implications. LCAPs can become the vehicles to improve the college and career readiness of students by harnessing community assets and tapping into the expertise of educators through informative and useful data. Implementing the recommendations in this policy brief will bring districts closer to transforming the A in LCAPs from Accountability to Actionability.

ACKNOWLEDGMENTS

Support for this policy brief comes from the California Education Policy Fund. The views presented in this policy brief reflect those of the authors, not necessarily those of the California Education Policy Fund.

ENDNOTES

[1] Beach, P., Thier, M., Lench, S. L., & Coleman, M. (2015). Defining a new North Star: Aligning local control accountability plans to college and career readiness. Eugene, OR: Educational Policy Improvement Center.

[2] Conley, D. T., Beach, P., Thier, M., Lench, S. C., & Chadwick, K. L. (2014). Measures for a college and career indicator: College admission exams. Eugene, OR: Educational Policy Improvement Center.

[3] Berliner, D. (2011). Rational responses to high stakes testing: The case of curriculum narrowing and the harm that follows. *Cambridge Journal of Education,* 41, 287–302.

[4] Schools received a schoolwide score from 200–1000 and a score for subgroups with 11 or more students. The schoolwide scores corresponded to two rankings from 0–10: one relative to all schools in California and another compared to a set of schools with similar demographic profiles.

[5] Carroll, S. J., Krop, C., Arkes, J., Morrison, P. A., & Flanagan, A. (2005). *California's K-12 public schools: How are they doing?* Santa Monica, CA: RAND Corporation.

[6] Oakes, J., & Saunders, M. (2004). Education's most basic tools: Access to textbooks and instructional materials in California's public schools. *The Teachers College Record,* 106(10), 1967–1988.

[7] More information available here

[8] Conley, D. T., Beach, P., Thier, M., Lench, S. C., & Chadwick, K. L. (2014). Measures for a college and career indicator: Course-taking behavior. Eugene, OR: Educational Policy Improvement Center.

[9] Ibid

[10] Students that score a 3 or higher on an AP exam and a 4 or higher on an IB exam are eligible for college credit at some postsecondary institutions.

[11] Hamilton, L. S., Schwartz, H. L., Stecher, B. M., & Steele, J. L. (2013). Improving accountability through expanded measures of performance. *Journal of Educational Administration,* 51(4), 453–475.

[12] Conley, D. T., Beach, P., Thier, M., Lench, S. C., & Chadwick, K. L. (2014). Measures for a college and career indicator: Final Report. Eugene, OR: Educational Policy Improvement Center.

[13] More information available here

[14] More information available here

[15] More information available here

[16] Means, B., Padilla, C., & Gallagher, L. (2010). Use of education data at the local level: From accountability to instructional improvement. Washingon, DC: U.S. Department of Education.

[17] Hamilton, *Improving Accountability,* 453-475.

[18] Conley, D. T., Beach, P., Thier, M., Lench, S. C., & Chadwick, K. L. (2014a). Measures for a college and career indicator: Multiple Measures. Eugene, OR: Educational Policy Improvement Center.

Educational Policy Improvement Center

www.epiconline.org