



Lisa Burke

Lisa Burke, Burke Consulting, has over 25 years of experience working in both public and private sectors, conducting project management, strategic planning and communications, meeting facilitation, and data analysis, performance measurement, and presentation. She is a skilled writer and presenter, with expertise in identifying key messages and crafting meaningful communication materials and documentation. For over 15 years, Burke has consulted for the Children and Families Commission of Orange County, and other clients include the Orange County United Way, University of California, Irvine, Orange County Transportation Authority, Orange County Care Coordination Collaborative for Kids, and the OC STEM Initiative. She holds a Master of Science in Civil Engineering/Infrastructure Planning and Management and a Bachelor of Arts/Economics from Stanford University.

Lisa J. Burke

Burke Consulting
3605 Lake Avenue
Newport Beach, CA 92663
949-200-6221 (office)
949-278-7088 (cell)
lisa@lisajburke.com



Early Math & Literacy Sustainability Strategies



Children & Families Commission of Orange County

June 4, 2014

Early Math: OC STEM Initiative



- Founding members of the OC STEM Initiative: Children & Families Commission and Samueli Foundation
- Membership includes over 15 business foundations and the Orange County Department of Education
- Initial investment supported the development and implementation of a strategic plan around five goal areas:
 1. **Organizational Structure:** Build a sustainable structure to support the ongoing implementation of successful STEM programs
 2. **Communications:** Promote awareness of STEM competencies and why they are important
 3. **STEM Learning:** Create interest among students, preschool through college, to pursue the development of their STEM knowledge, skills and abilities
 4. **Professional Development:** Promote educators' STEM knowledge, competencies, and pedagogy
 5. **Workforce Development:** Bridge the gap between a STEM-educated workforce and Orange County businesses' demands
- Commission membership renewed through 2017 to continue strategic plan implementation
- **Sustainability: Increase membership to support STEM education programs**

Early Math: Early Childhood STEM Conference



- Partnered with The Children's Center at Caltech and THINK Together for the February 2014 Early Childhood STEM Conference
- Over 500 early educators participated in the three-day conference in Costa Mesa providing workshops, demonstrations, and presentations to support early STEM education
- Conference was convened in response to early educators request for professional development and training in the area of early math and STEM education
- On-going mentoring and support to early educators continues in partnership with the Orange County Department of Education
- The next Early Childhood STEM Conference is scheduled for 2015 in Costa Mesa
- **Sustainability: Increased sponsorship and registration fees seed future conferences**





- Developed the Math Early Learning Program, and interactive instructional software program to improve math proficiency and problem solving skills of pre-kindergarten children
- Program is designed to help reduce early achievement gaps and prepare children from all socio-economic and cultural backgrounds for success in elementary and middle school math
- Program is closely aligned to the California Department of Education Preschool Learning Foundations for Early Childhood Education, with emphasis on preparing children for the Common Core standards in kindergarten
- The Commission entered a four-Year partnership (FY 12/13 –FY 15/16) to implement the program at 40 new school sites (10 per year)
- MIND's Early Math Learning Program is current implemented in 42 classrooms at 25 schools in six school districts
- An evaluation to assess the early math skills of young children that participated in the program as compared to others that did not participate is in the planning stages
- **Sustainability: Use evaluation data to interest funding partners**

Early Math & Literacy: THINK Together



- \$5 million Catalytic Agreement for the long-term implementation of countywide early literacy and math programs
- Lease cost savings resulting from purchasing a building are used to partially support annual programs and operations
- Implementing evidence-based early literacy programs:
 - Reach Out and Read
 - Raising a Reader
 - Center-Based Math & Literacy
 - Read for the Record
- Initiated the annual Early Childhood STEM Conference in partnership with the Children's Center at Caltech
- **Sustainability: Early Literacy & Math Program Sustainability Planning - Vision, goals and strategies report due June 2014**

Early Math & Literacy: School Districts



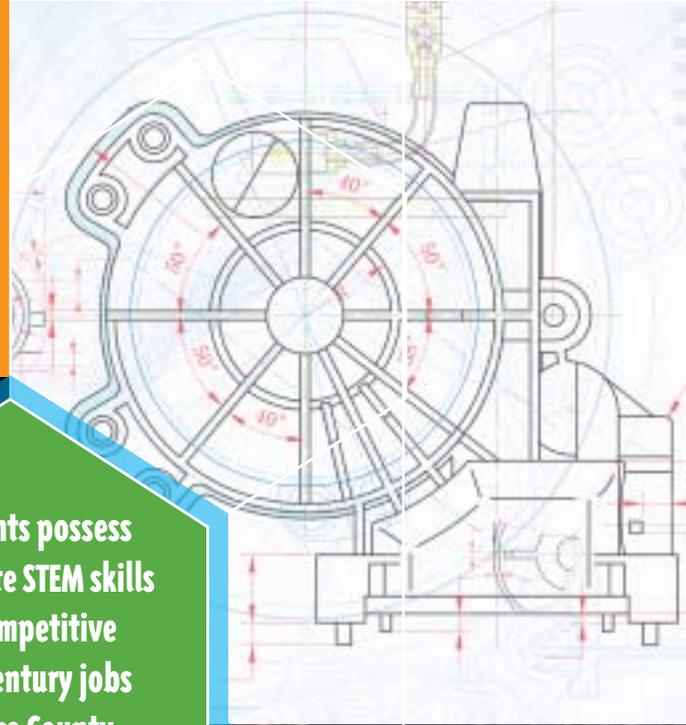
- Countywide Early Learning Specialists provide early education and childhood development programs to maximize children's potential and success in school
- Partnerships with the 25 elementary school districts are the infrastructure for delivering community-based early literacy and math programs
- Learning Links provide a venue for children to experience early literacy and math programs with their parent/caregiver
- Currently 17 school districts operate Learning Link programs at 26 sites throughout the county. Days and hours of operation vary from 6-days a year/3-hours a day, to 4-days a week/5-hours a day
- **Sustainability: Based on demonstrated results of effective programs, include early learning in the school districts Local Control Funding Formula/Local Control Accountability Plan (LCAP)**

Early Literacy: Champions for Children's Literacy



- The Champions for Children's Literacy is a new group modeled after the OC STEM Initiative with a vision to improve reading scores. The target is that all third-graders are proficient, or better readers
- The members include: the Commission, Orange County United Way/Women's Philanthropy Group, Orange County Department of Education, THINK Together, and CalOptima
- The Champions for Children's Literacy identified four objectives:
 1. Increase community awareness of the importance of early literacy and early grade reading
 2. Expand proven literacy programs
 3. Pilot new literacy programs
 4. Build the Literacy Coalition and its infrastructure
- **Sustainability: Broaden membership to include foundations and funding partners interested in supporting early literacy. OCUW committed \$100,000 to the Coalition.**

OC STEM Initiative



Vision

All students possess the requisite STEM skills to be competitive for 21st century jobs in Orange County

All educators and teachers are provided the tools and support to ensure their students are STEM competent and STEM literate

Orange County is a leader in STEM workforce competitiveness in California and the United States

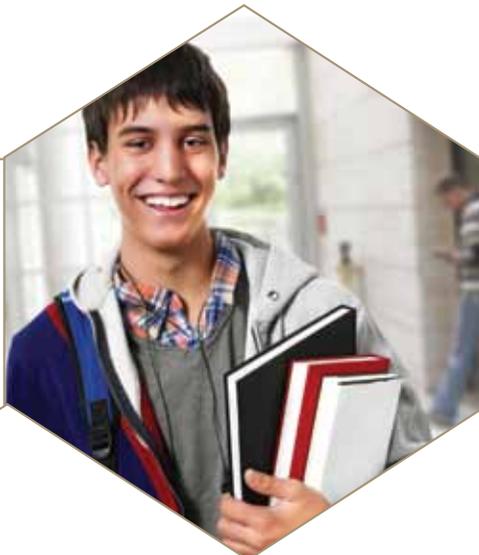


Blue Print for Success

Organizational Structure

Goal: Build a sustainable structure to support the ongoing implementation of successful STEM programs

Activity	Deliverables	Short Term Benchmarks (1 - 3 years)	Long Term Benchmarks (4-6 years)
<p>Develop a funders' network</p> <p>Develop a funding strategy</p> <p>Adopt an action plan and logic model</p> <p>Develop staff and operational support</p> <p>Create a process for organizational evaluation</p>	<p>Funders network structure including bylaws, meeting protocol, governance, budget, and membership roster</p> <p>Case statement</p> <p>Annual fund development plan</p> <p>Blueprint for OC STEM success</p> <p>Online, dynamic Blueprint for OC STEM success</p> <p>Branding session/outcomes to develop OC STEM branding moving from "initiative" to established program</p> <p>Executive Director and administrative and operations staff members in place</p> <p>Office space and equipment secured</p> <p>Annual evaluation or audit report prepared by outside firm assessing the organization, including staff positions, expertise needed, etc.</p>	<p>Increased number of funding partners supporting STEM in Orange County</p> <p>Established Governing Directors for OC STEM network and criteria</p> <p>Increased dollars dedicated to STEM operations and programs through philanthropy and government grants</p> <p>Increased number of funding partners adopt/approve Blueprint for OC STEM success</p> <p>Regular updates on OC STEM programs/progress on website</p> <p>OC STEM becomes an established, branded program</p> <p>Executive Director and at least one staff members hired</p> <p>Temporary office space for OC STEM program operations identified</p> <p>Funders review and implement recommendations from organizational evaluation annually</p> <p>Organizational Success Indicators identified, tracked and show improvement</p>	<p>Increased number of funding partners providing sustainable capacity and support for the STEM Initiative in Orange County</p> <p>OC STEM network considers becoming its own 501(c) 3</p> <p>Regular updates on OC STEM program progress on website</p> <p>OC STEM becomes countywide, recognized program for STEM success</p> <p>Expanded staff if needed</p> <p>Permanent office space and operating equipment secured</p> <p>Funders review and implement recommendations from organizational evaluation annually</p> <p>Organizational Success Indicators identified, tracked and show improvement</p>



Blue Print for Success

STEM Communications Strategy

Goal: Promote awareness of STEM competencies and why they are important

Activity	Deliverables	Short Term Benchmarks (1 - 3 years)	Long Term Benchmarks (4-6 years)
<p>Design and implement awareness campaign(s) for various audiences</p> <p>Gather business, educators, government, funders, community organizations on a regular basis to share STEM-related information, resources, and results</p>	<p>Strategic Awareness Campaign/ communications materials targeting all audiences including hard to reach populations</p> <p>Quarterly STEM-related lecture series for network members</p> <p>Annual STEM gathering for STEM programs across the educational continuum and workforce development</p> <p>OC STEM Website</p>	<p>Public awareness consultant hired to design and implement STEM-focused public awareness campaign(s)</p> <p>Increased number of awareness campaigns conducted</p> <p>Increased traffic/data analytics for the newsletter</p> <p>Increased number and breadth of participants at quarterly and annual gatherings.</p> <p>Increased awareness about STEM throughout various sectors (private, public, education) in Orange County</p> <p>Increased traffic/data analytics for the website, create intranet for lead STEM practitioners</p>	<p>Increased awareness about STEM throughout various sectors (private, public, education) in Orange County</p> <p>Question about STEM awareness added to a countywide survey</p>

STEM Learning

Goal: Create interest among students, preschool through college, to pursue the development of their STEM knowledge, skills and abilities

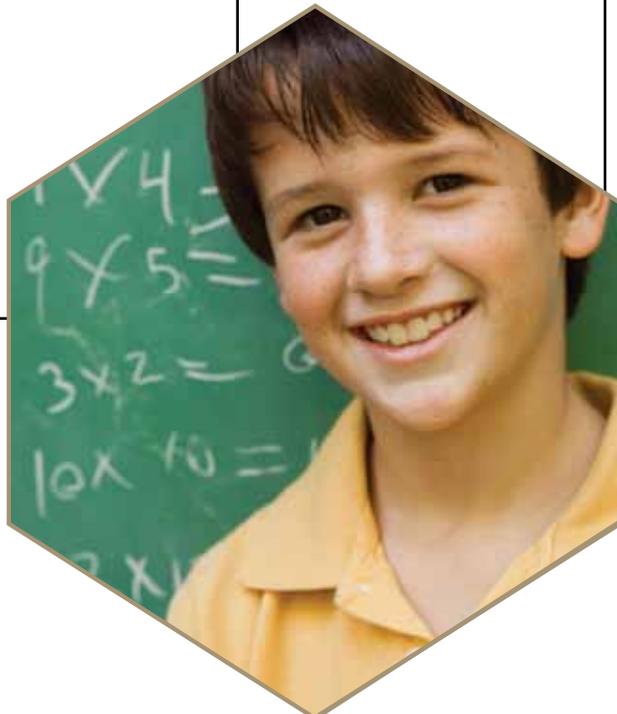
Activity	Deliverables	Short Term Benchmarks (1 - 3 years)	Long Term Benchmarks (4-6 years)
<p>Introduce and implement STEM curricula in preschool classrooms.</p> <p>Increase the opportunity for K-12 students to experience project-based, hands-on STEM learning, for in-school and out-of-school environments</p> <p>Expand a career and college ready pathway with STEM disciplines taught linking high schools and community colleges with higher education</p> <p>Expand the number of students who pursue advanced certifications and degrees in STEM fields</p>	<p>A continuum of STEM programs targeted to preschool through college-aged students that align with common core and next generation science standards, and meet established best practice standards.*</p> <p><i>*Each program will have its own detailed summary sheet of the program and related activities/deliverables.</i></p>	<p>Increased number of STEM programs, preschool through college</p> <p>Increased number of out-of-school (OST) STEM programs</p> <p>Increased number of informal learning opportunities for families and communities</p> <p>Increased number of STEM professionals and volunteers in preK-12 classrooms</p> <p>Increased number of students taking AP classes in STEM subject areas</p> <p>Increase in student achievement in STEM subject areas</p> <p>Increased number of ROP certificates related to STEM awarded to high school students in Orange County</p> <p>Increased number of STEM career pathways from high school and community colleges to four-year institutions</p>	<p>Increased number of quality/effective STEM programs in Orange County</p> <p>Every student PreK-12 experiences project-based, inquiry-based learning</p> <p>Increased number of schools providing fully integrated STEM approach bridging out-of-school and in-school platforms</p> <p>Increased student achievement in STEM subject areas</p> <p>Increased number of students taking AP classes in STEM subject areas</p> <p>Increased number of ROP certificates sought after by students</p> <p>Increased number of STEM programs offering pathways to community college and higher education</p> <p>Decreased number of students requiring remedial math for college entry</p> <p>Increased number of college graduates with STEM majors</p>

Blue Print for Success

Professional Development

Goal: Promote educators' STEM knowledge, competencies, and pedagogy

Activity	Deliverables	Short Term Benchmarks (1 - 3 years)	Long Term Benchmarks (4-6 years)
<p>Develop STEM-related professional development strategies targeted to educators at all levels of the educational continuum for both formal and informal learning environments:</p> <ul style="list-style-type: none"> • PreK • K – 6 • Middle School • High School • College <p>Promote integration of STEM-related disciplines and competencies into the curriculum of educational institutions with education credentialing or early care disciplines</p>	<p>A robust online professional development platform on STEM for all educators and teachers in STEM disciplines</p> <p>A Lead STEM Practitioner program established at Orange County school districts</p> <p>A STEM internship and mentoring program between businesses, community colleges, and four-year institutions</p> <p>A workshop for leaders at Orange County universities, colleges and community colleges that have a credentialing or early education career program to begin the discussion of the importance of STEM education and competencies</p>	<p>Increased number of STEM-related professional development opportunities</p> <p>Increased number of educators attending professional development opportunities</p> <p>Increased number of educators utilizing the online professional development platform</p> <p>Increased number of internship and mentoring programs between business, community colleges, and four-year institutions</p> <p>Increased number of mentors/mentees participating in internship and mentoring programs per year</p> <p>Increased number of preschool through college educators with STEM teaching competency</p>	<p>Change in PreK through college educator attitudes about the necessity for teaching and learning STEM competencies</p> <p>Increased number of preschool through college educators with STEM teaching competency</p> <p>Change in educator, administrator, and after-school staff attitudes towards an integrated approach to STEM teaching and learning between out-of-school and in-school platforms</p> <p>STEM disciplines and competencies become standardized into the curriculum for educators and early care providers</p> <p>A continuing education (CE) professional development program with incentives</p> <p>Every Orange County teacher has participated in a STEM-related professional development workshop</p> <p>Every student in an educational/early care discipline has taken a STEM-related workshop/course</p>



Blue Print for Success

Workforce Development

Goal: Bridge the gap between a STEM-educated workforce and Orange County businesses' demands

Activity	Deliverables	Short Term Benchmarks (1 - 3 years)	Long Term Benchmarks (4-6 years)
Improve linkage between Orange County's STEM-related industries/businesses and educational institutions	Bring workforce/industry leaders (e.g. Workforce Investment Board, OCBC, OCTANe) together with educational institution leaders on a regular basis to facilitate dialogue about emerging workforce needs, regional occupational shortages, and to reinforce STEM competency needs and proficiency requirements	Orange County Workforce Indicators Report is used to inform dialogue between STEM businesses/ educational institutions Reduced shortage of locally-trained STEM-capable workers	Reduced shortage of locally-trained STEM-capable workers Provide a tangible pathway for locally educated OC students to remain in OC in gainfully employed STEM positions that meet the needs of local STEM employers, while providing a quality standard of living for the employee

Research and Evaluation

Goal: Promote rigorous research-based approaches to STEM teaching and learning

Activity	Deliverables	Short Term Benchmarks (1 - 3 years)	Long Term Benchmarks (4-6 years)
Create a process for research and evaluation related to STEM activities in Orange County	A regularly updated database of STEM programs in Orange County A metrics tool for assessing outcomes and programs	Increased number of quality/effective STEM programs in Orange County	Increased number of quality/effective STEM programs in Orange County Develop a grading or rating type system to assess quality and comparison of STEM program providers



**OC STEM
Initiative Funding
Partners**

Broadcom Foundation

Children and Families
Commission of
Orange County

Cotsen Foundation

Edward Lifesciences
Fund

JP Morgan Chase Bank

OCTANe

Opus Community
Foundation

Orange County
Department
of Education

Orange County
United Way

Samueli Foundation

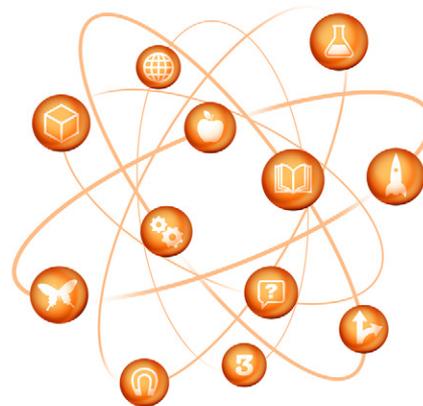
The Allergan
Foundation

The Boeing Company

The Kay Family
Foundation

Tiger Woods Learning
Center/Foundation

Time Warner Cable



EARLY CHILDHOOD STEM CONFERENCE

Science Technology Engineering Math

February 5-7, 2015
Hilton Orange County, Costa Mesa, CA

Hosted by The Children's Center at Caltech, THINK Together,
and Children and Families Commission of Orange County

For more information contact ecstem@caltech.edu
or visit www.childrenscenteratcaltech.org,
www.thinktogether.org or www.occhildrenandfamilies.com



THE CHILDREN'S
CENTER AT CALTECH



1200 E California Blvd
Mail Code 1-12
Pasadena, CA 91125

Events to look forward to:

- Special Thursday Evening Event with Expert Panel Discussions on current trends and shifts in STEM education
- Keynote address on Friday and Saturday
- Workshops for Infant/Toddler, Preschool, Transitional Kindergarten, and Kindergarten through First grade educators with special strands in the areas of Froebel and Reggio Emilia
- Exhibits displaying the latest resources for early childhood education practitioners

Local Control Funding Formula Overview

Information about Local Control Funding Formula funding and accountability provisions.

Funding Provisions

The 2013–14 budget package replaces the previous K–12 finance system with a new Local Control Funding Formula (LCFF). For school districts and charter schools, the LCFF creates base, supplemental, and concentration grants in place of most previously existing K–12 funding streams, including revenue limits and most state categorical programs. For county offices of education (COEs), the LCFF creates separate funding streams for oversight activities and instructional programs.

The 2013–14 Budget Act provides \$2.1 billion for school districts and charter schools and \$32 million for COEs to support the first-year implementation of the LCFF. Until full implementation, however, local educational agencies (LEAs) will receive roughly the same amount of funding they received in 2012–13 plus an additional amount each year to bridge the gap between current funding levels and the new LCFF target levels. The budget projects the time frame for full implementation of the LCFF to be eight years.

The LCFF includes the following components for school districts and charter schools:

- Provides a base grant for each LEA equivalent to \$7,643 per average daily attendance (ADA). The actual base grants would vary based on grade span.
- Provides an adjustment of 10.4 percent on the base grant amount for kindergarten through grade three (K–3). As a condition of receiving these funds, the LEA shall progress toward an average class enrollment of no more than 24 pupils in kindergarten through grade three, unless the LEA has collectively bargained an annual alternative average class enrollment in those grades for each school site.
- Provides an adjustment of 2.6 percent on the base grant amount for grades nine through twelve.
- Provides a supplemental grant equal to 20 percent of the adjusted base grant for targeted disadvantaged students. Targeted students are those classified as English learners (EL), eligible to receive a free or reduced-price meal (FRPM), foster youth, or any combination of these factors (unduplicated count).
- Provides a concentration grant equal to 50 percent of the adjusted base grant for targeted students exceeding 55 percent of an LEA's enrollment.
- Provides for additional funding based on an "economic recovery target" to ensure that virtually all districts are at least restored to their 2007–08 state funding levels (adjusted for inflation) and also guarantees a minimum amount of state aid to LEAs.

The budget maintains Home-to-School Transportation and Targeted Instructional Improvement Block Grant funding as add-ons to the LCFF. The budget requires LEAs to maintain 2012–13 expenditure levels on transportation out of funds received for this purpose.

A summary of the target LCFF funding amounts for school districts and charter schools is shown in Figure 1.

Figure 1
Grade Span Funding at Full LCFF Implementation

Grade Span	Base Grant	K-3 Class Size Reduction and Grades 9-12 Adjustments	Average Assuming 0% Unduplicated FRPM, EL, Foster Youth	Average Assuming 25% Unduplicated FRPM, EL, Foster Youth	Average Assuming 50% Unduplicated FRPM, EL, Foster Youth	Average Assuming 100% Unduplicated FRPM, EL, Foster Youth
K–3	\$6,845	\$712	\$7,557	\$7,935	\$8,313	\$10,769
4–6	\$6,947	N/A	\$6,947	\$7,294	\$7,642	\$9,899
7–8	\$7,154	N/A	\$7,154	\$7,512	\$7,869	\$10,194
9–12	\$8,289	\$216	\$8,505	\$8,930	\$9,355	\$12,119

COEs receive LCFF funding through a two-part formula with funding for oversight responsibilities and instructional activities. The oversight responsibilities are funded through a COE operations grant, with amounts based on (1) a minimum grant per county, (2) the number of school districts in the county, and (3) the ADA in the county attributable to school districts, charter schools, and schools operated by the county superintendent.

A summary of county funding for oversight responsibilities is shown in Figure 2.

Figure 2
County Oversight Funding at Full LCFF Implementation

Per county	\$655,920
Per school district	\$109,320
Per ADA for ADA up to 30,000	\$70
Per ADA for ADA between 30,000 and 60,000	\$60
Per ADA for ADA between 60,000 and 140,000	\$50
Per ADA for ADA over 140,000	\$40

At full LCFF implementation, instructional activities of COEs are funded based on the category of pupil served:

- Certain pupils served by county offices (on probation, probation referred, and mandatory expelled) receive an alternative education base grant of \$11,045. In addition to the base grant, COEs receive a supplemental grant equal to 35 percent of the base grant for targeted students and a concentration grant equal to 35 percent of the base grant for targeted students exceeding 50 percent of enrollment.
- Juvenile court school pupils are funded with a base grant of \$11,045. Additionally, all juvenile court school pupils are deemed to be eligible for the supplemental and concentration grants provided for targeted disadvantaged students. The supplemental grant is equal to 35 percent of the base grant, and the concentration grant is equal to 35 percent of the base grant for students exceeding 50 percent of the juvenile court school enrollment.
- Other pupils served by COEs are funded based on funding of their home school district.

LCFF Accountability

As part of the LCFF, school districts, COEs, and charter schools are required to develop, adopt, and annually update a three-year Local Control and Accountability Plan (LCAP), beginning on July 1, 2014, using a template adopted by the California State Board of Education (SBE) on or before March 31, 2014. In addition, the SBE is required to adopt evaluation rubrics to assist LEAs and oversight entities in evaluating strengths, weaknesses, areas that require improvement, technical assistance needs, and where interventions are warranted on or before October 1, 2015. Subsequent revisions to the template or evaluation rubrics are required to be approved by the SBE by January 31 before the fiscal year in which the template or rubric would be used. The LCAP is required to identify goals and measure progress for student subgroups across multiple performance indicators. The budget provides \$2 million to the Governor's Office of Planning and Research to support the development of the LCAP template, regulations, and evaluation rubric.

Other LCFF accountability components include:

- The SBE must adopt regulations that govern the expenditure of the supplemental and concentration grant funding. These regulations will require school districts, COEs, and charter schools "to increase and improve" services for targeted students and will provide authority for school districts to spend funds "school-wide" when significant populations of those students attend a school.
- LEAs must obtain parent and public input in developing, revising, and updating LCAPs.
- County superintendents must review school district LCAPs and ensure alignment of projected spending, services, and goals. Charter school LCAPs will be reviewed by the chartering authority. COEs are required to provide technical assistance when they disapprove an LCAP.
- The State Superintendent of Public Instruction must review LCAPs of COEs, as well as intervene if a school district or charter school fails to show improvement across multiple subgroups in three out of four consecutive years.
- The budget package provides \$10 million to establish a new regional support network, called the California Collaborative for Educational Excellence, to advise and assist LEAs in achieving their LCAP goals.
- The budget package reduces subgroup size from 50 to 30 students and establishes foster youth as a new subgroup, with a subgroup size of 15, for purposes of Academic Performance Index accountability.