California is experiencing a shortage of workers for middle-skill jobs that is projected to continue into the foreseeable future. Middle-skill jobs are those that require some level of postsecondary education: more than a high school diploma but less than a four-year college degree. The need for a middle-skill workforce is spurred by an increasing demand for workers in science, technology, engineering and mathematics (STEM)-related fields, and the impending retirement of baby boomers who currently work in those jobs. Linked Learning is an approach that can help prepare a workforce with the capacity to fill these middle-skill jobs.

Linked Learning is a high school reform approach with the goal of ensuring equitable college and career readiness for all graduates. The approach combines rigorous academics, career themed curriculum, wrap-around support services and project/work-based learning with real-world experience in a wide range of fields, such as engineering, arts and media, biomedical engineering and health sciences. Initial findings show that the Linked Learning approach can increase high school graduation and postsecondary enrollment rates. A major contributor to these improved outcomes is the enhanced engagement Linked Learning students experience as a result of relevant and real world instruction that is project-based and career themed. Both of these student outcomes—improved achievement and engagement—are among the eight priorities that districts must address in their Local Control and Accountability Plans (LCAPs) under the Local Control Funding Formula (LCFF). Linked Learning promises to be a sound investment for these and other LCAP priorities while also addressing students’ preparation for postsecondary opportunities.

America’s Edge is a membership organization of business leaders who work to strengthen businesses and the economy through proven investments in children and youth. They “educate policy-makers and the public about research-based investments that will enable their businesses to compete in today’s competitive global marketplace, build a foundation for lasting economic security and help our nation’s children get on the right track.” This fact sheet summarizes the findings from an America’s Edge report, Can California Compete? Reducing the Skills Gap and Creating a Skilled Workforce through Linked Learning.

**Findings**

**Findings related to high school graduate preparedness**

» In 2006, 50% of employer participants in a nationwide survey reported that new workforce entrants with a high school diploma were deficient in math and science skills, and 40% percent reported the same with regard to reading comprehension.

» Each year 300,000 young men and women leave school (either as dropouts or graduates)
without meeting the entrance requirements for state universities.

» Among California’s 2007 high school graduates, only 33% met admission requirements for the California State University and only 13% met those of the University of California.

Findings related to Linked Learning and career-focused high school programs

» A study of Linked Learning at Porterville High School found that 92% of the students in the health academy pathway and 88% of students in the business/finance pathway had GPAs of over 2.0, while only 66% of non-pathway students had GPAs of over 2.0.

» A study of the Linked Learning approach in San Diego found that the School of Digital Media and Design at Kearny High School, graduated 99% of its 2009 class and 95% went on to postsecondary education.

» A national study by the New York Manpower Demonstration Research Corporation (MDRC) showed that young people who attended Career Academies in high school earned more and worked more hours than those who did not.

» MDRC reported that eight years after graduation, young men who attended Career Academies earned $3,731 more per year than non-participants (a lifetime difference of $175,000).

For further information:

CSBA sample board policy and administrative regulation BP/AP 6178 – Career Technical Education

Local Control Funding Formula 2013, CSBA Governance Brief, August 2013 http://bit.ly/1cpcp9Q

State Priorities for Funding: The Need for Local Control and Accountability Plans, CSBA Fact Sheet, August 2013 http://bit.ly/1fLi05m


CSBA joins work to link students with college and career opportunities, CSBA blog post, June 20, 2013 http://bit.ly/15RtDDd

Executive Committee sees successful Linked Learning programs in action, CSBA blog post, June 25, 2013 http://bit.ly/1fSIGmL

Urban districts look to Linked Learning partnerships as a way to promote equity, CSBA blog post, December 16, 2013 http://bit.ly/19q8yrT


Unemployment rate in CA by education level (2009)

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than High School</td>
<td>17.3%</td>
</tr>
<tr>
<td>High School</td>
<td>12.2%</td>
</tr>
<tr>
<td>Some College</td>
<td>8.8%</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>6.1%</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

Findings related to employment demand

» In 2010, three out of four executives surveyed reported that soft-skills: communication, collaboration, critical thinking, and creativity are becoming increasingly important. Moreover, fewer than half of these executives rated their current employees as above average in these soft skills.

» In 2009, 47% of available California jobs were those requiring middle skills, but only 38% of Californians were appropriately trained for these jobs—a gap of 9%.

» Between 2008 and 2018, 40% of job openings in California are expected to be middle skill jobs.

» In 2011, 70% of U.S manufacturing companies surveyed reported a moderate to severe shortage of available, qualified workers, especially in skilled production jobs.

» By 2018, three out of five California jobs will require some education beyond high school.

» The unemployment rate in California for those with less than a high school degree is more than four times that of those with a Master’s Degree or higher.