California Urban Crisis and Fiscal Decline:  
Trends in High School Dropout Rates and Economic Implications

By

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Abstract

California’s economic fate is largely dependent on the ability to mediate high school dropout rates in public schools. The dropout rate has rightfully been considered a crisis for some time now, but when viewed in the context of California’s and the United States’ economic woes, it can easily be understood as a dire emergency. California has a population increasingly ill equipped to work in an evolving job market, compounded by an economy that is ill equipped to compensate for the problem. Policy makers and the public tend to point to job creation as the catalyst for spurring the economy. However, while this may be effective to a degree, it ignores the growing subpopulation of undereducated adults who will expend, rather than contribute to, California’s resources.

Background

According to Delaine Eastin (2011), former California state superintendent of public instruction, 68 percent of the 2011 freshman class will graduate – 32 percent will not. Dropout rates are highest in low-income urban areas and less than two-thirds of students graduate from these areas by the end of twelfth grade. Some students take alternate paths (e.g., acquiring GED’s), but many drop out. For individuals who do not graduate, the consequences generally include low income, greater risk of health problems, and greater dependence on welfare. These consequences impact society as well, in particular, California’s economy. More than two-thirds
of dropouts will use food stamps or other forms of public support (Belfield, & Levin, 2007), and The Alliance for Excellent Education (2009) estimates, “Dropouts from the class of 2008 will cost California almost $42.1 billion in lost wages over their lifetimes” (p. 1). To emphasize the magnitude of the trend, 10 years of high school dropouts could ultimately cost the state approximately half a trillion dollars in potential earnings.

While the causes of this problem are complex, experts advocate for solutions that address the psychological, family, community, and academic spheres of students’ lives. ALAS (Spanish for “wings”), is an intervention program implemented in California designed to address the above problems. One component of the program utilizes counselors and mentors who monitor students’ performance and acts as an intermediary between students, schools, families, and community resources. Another alternative program implemented in California, the Career Academy, does not specifically address the psychological, family, or community spheres of students’ lives, but does serve an important societal function in providing students an alternative, practical curriculum that instills job skills and professional development and exposes students to employment opportunities after high school. Career Academies are implemented within high schools and serve a sub-population of the student body (generally, between 100 and 400 students).

These programs have the potential to keep students in school based on studies of both programs. ALAS has the potential to reduce the dropout rate by 20% to 30% and Career Academies have the potential to reduce the dropout rate by approximately 11%. The primary stakeholders are students and their families specifically from in low-income urban areas who
participate in the program(s). Other stakeholders include the Governor of California, California state representatives, The California Education Department, California school boards, California school districts, education administrators, teachers, and school counselors.

**Societal Problem/Issue**

Failure to engage students in low-income urban areas is the crux of California’s high school dropout problem. This is particularly true of urban areas with high concentrations of Latino and African American students. State Superintendent of Public Instruction, Jack O’Connell (2010), recently reported graduation/dropout statistics for the 2008-09 school year, which show a 70.1 graduation rate\(^1\) of public school students. This is a modest improvement from the previous year’s rate of 68.5 percent, however the graduation rates for Hispanic and African American students were 59 percent and 59.6 percent, respectively. The state’s dropout rate\(^2\) for 2008-09 was 21.5, an increase from the previous year’s 18.9 percent. The dropout rates for Hispanics and African Americans were estimated at 26.9 and 36.9, respectively.

Compared to the 2008-09 school year, Delaine Eastin (2011), former California state superintendent of public instruction, projects a slight decrease in the graduation rate - 68 percent - for the 2011 freshman class. Eastin also argues that California dropout measurements are “understated” (Eastin, 2011) because budget cuts have impeded development of a better tracking

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\(^1\) Graduation rate is defined as “the percentage of original ninth-grade students who earn standard high school diplomas and graduate in four years or less (South Carolina, 2010).”

\(^2\) Dropout rate is defined as “the percentage of students who were enrolled in ninth grade but are not enrolled in 12th grade and have not told the district that they are transferring (Schoolmatch, 2010).”
system. Despite understated measurements, she supports estimates that place dropout rates for Hispanic and African American students at 31.3 percent and 41.3 percent, respectively (Eastin, 2011). Budget cuts have also had a negative impact on California’s counselor per student ratio – the state is currently ranked 49th out of 50 (Campbell, 2010) – and California is currently ranked 43rd in per pupil spending (Fensterwald, 2011).

The following tables show dropout rates by selected urban counties and by race/ethnicity (i.e. the percentage of dropouts within each racial/ethnic group):

### Table 1

**Dropout Rates in Selected California Urban Districts (2008-2009)**

<table>
<thead>
<tr>
<th>Large urban high school districts in California</th>
<th>Dropout Rate (%)&lt;sup&gt;3&lt;/sup&gt; (California average: 21.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oakland Unified</strong></td>
<td>40.0</td>
</tr>
<tr>
<td><strong>Los Angeles Unified</strong></td>
<td>29.6</td>
</tr>
<tr>
<td><strong>Pomona Unified</strong></td>
<td>26.9</td>
</tr>
<tr>
<td><strong>Sacramento City Unified</strong></td>
<td>25.5</td>
</tr>
<tr>
<td><strong>San Diego Unified</strong></td>
<td>23.5</td>
</tr>
<tr>
<td><strong>Fresno Unified</strong></td>
<td>23.0</td>
</tr>
<tr>
<td><strong>Pasadena Unified</strong></td>
<td>19.9</td>
</tr>
<tr>
<td><strong>Long Beach Unified</strong></td>
<td>16.9</td>
</tr>
<tr>
<td><strong>San Francisco Unified</strong></td>
<td>9.1</td>
</tr>
</tbody>
</table>

<sup>3</sup> The 4-year derived dropout rate is an estimate of the percent of students who would drop out in a four year period based on data collected for a single year.
Table 2

Dropout rates in California by race/ethnicity (2008-2009)

<table>
<thead>
<tr>
<th></th>
<th>Dropout Rate (%)</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American students</td>
<td>36.8</td>
<td>12,508</td>
</tr>
<tr>
<td>Latino students</td>
<td>30.0</td>
<td>53,430</td>
</tr>
<tr>
<td>White students</td>
<td>14.1</td>
<td>16,475</td>
</tr>
<tr>
<td>Asian students</td>
<td>9.6</td>
<td>3,072</td>
</tr>
</tbody>
</table>

Information: (California Department of Education, 2011)

The relationship between high dropout rates and low-income urban areas is well researched. Findings show that less than two-thirds of students graduate from communities with “high levels of racial and socioeconomic segregation” (The Civil Rights Project, 2005, p. 5). In other words, communities that are relatively homogenous in terms of race and low socioeconomic level are less likely to produce high school graduates. The causes for this relationship are complex, as Russell Rumberger (2001) director of the California Dropout Research Project, asserts, “identifying the causes of dropping out is extremely difficult to do because… [they are] influenced by an array of proximal and distal factors related to both the

4 The threshold for “low-income” is defined as twice the poverty level (Douglas-Hall, & Chau, 2006), which calculates to $44,256 for a family of four, based on the U.S. Census poverty threshold for 2009 (U.S. Census Bureau, 2010).
individual student and to the family, school, and community settings in which the student lives” (p. 9). However, it helps to think of dropping out as a “process,” rather than an “event” (Rumberger, and Lim, 2008, p. 67).

Studies show that the process can begin as early as preschool or early elementary school, with “academic performance and academic and social behaviors [being] the two most consistent indicators [of future high school dropouts]” (Rumberger, and Lim, 2008, p. 67). In addition, contextual factors, including “access to not only fiscal and material resources, but also social resources in the form of supportive relationships in families, schools, and communities” (Rumberger, and Lim, 2008, p. 67), determine the likelihood of graduating or dropping out. These findings imply that targeted intervention (e.g., tutoring, counseling, social support) can mediate factors that typically produce dropouts. In fact, it has been found that “high quality preschool programs and small classes in early elementary school…improve high school graduation rates” (Rumberger, and Lim, 2008, p. 67). At the high school level, Rumberger, and Lim (2008) suggest targeting programs toward high-risk students and implementing comprehensive school reform models as a proven, cost-effective approach for improving graduation rates.

When considering the cost-effectiveness of programs or policies in education, it is important to consider the costs of maintaining the status quo. For individuals who do not graduate, the consequences generally include low income, greater risk of health problems, and greater dependence on welfare. These consequences impact society as well; particularly, California’s economy. More than two-thirds of dropouts will use food stamps or other forms of
public support (Belfield, & Levin, 2007), and The Alliance for Excellent Education (2009) estimates, “Dropouts from the class of 2008 will cost California almost $42.1 billion in lost wages over their lifetimes” (p. 1). To emphasize the magnitude of this trend, 10 years of high school dropouts could ultimately cost the state approximately half a trillion dollars in potential earnings.

The following 3 tables depict estimates of how much California loses in tax revenue each year (Table 3), spends on Medicaid each year (Table 4), and spends on incarceration each year (Table 5), as a result of individuals who never graduate from high school.
Table 3

*Dropouts reduce California’s tax revenue by almost $1 billion per year:*

Fiscal Impact of California’s Dropouts on Personal Income and State Tax Revenue

<table>
<thead>
<tr>
<th>Population</th>
<th>Annual Personal Income</th>
<th>Annual State Income Tax Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dropout</strong></td>
<td>3,800,000</td>
<td>$16,700</td>
</tr>
<tr>
<td><strong>H.S. Graduate</strong></td>
<td>5,025,000</td>
<td>$27,406</td>
</tr>
<tr>
<td><strong>Some College</strong></td>
<td>6,300,000</td>
<td>$36,596</td>
</tr>
<tr>
<td><strong>Bachelor’s or Higher</strong></td>
<td>6,575,000</td>
<td>$70,224</td>
</tr>
</tbody>
</table>

Fiscal Impact per Dropout

($14,226)     ($252)

x 3.8 million Dropouts

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5 “Notes: The sample is limited to adults 20 to 65 years of age who are not college students. State tax liabilities are calculated assuming all individuals were heads of household with no dependents in 2009. The fiscal impact estimate is calculated as the difference between the average state income tax contributions of high school dropouts and expected high school graduates. According to national probabilities, these expected graduates have a 5% chance of completing a B.A., a 15% chance of completing some college, and an 80% chance of terminating education after high school. Source: Authors’ Calculations. U.S. Census Bureau, Current Population Survey (March 2006-2009); TAXSIM” (Stuit, and Springer, 2010, p. 17).
Total Fiscal Impact ($54.1 billion) ($958 million)

(Stuit, and Springer, 2010, p. 17)

Table 4

Higher Medicaid use by dropouts costs California more than $1 billion per year:

Fiscal Impact of California’s Dropouts on State Medicaid Expenses

<table>
<thead>
<tr>
<th>Population</th>
<th>% on Medicaid</th>
<th>Average State Medicaid Expense Per Person</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dropout</strong></td>
<td>3,800,000</td>
<td>47.6</td>
</tr>
<tr>
<td><strong>H.S. Graduate</strong></td>
<td>5,025,000</td>
<td>27.7</td>
</tr>
<tr>
<td><strong>Some College</strong></td>
<td>6,300,000</td>
<td>17.5</td>
</tr>
<tr>
<td><strong>Bachelor’s or Higher</strong></td>
<td>6,575,000</td>
<td>7.9</td>
</tr>
</tbody>
</table>

Fiscal Impact per Dropout ($283)

Notes: The sample is limited to adults 25 to 65 years of age who are not college students. The fiscal impact estimate is calculated as the difference in the average Medicaid expense of high school dropouts and graduates. According to national probabilities, graduates have a 5% chance of completing a B.A., a 15% chance of completing some college, and an 80% chance of terminating education after high school. Source: Authors’ calculations from the U.S. Census Bureau, Current Population Survey (March, 2006-2009), data for California, (Stuit, and Springer, 2010, p. 20).
x 3.8 million Dropouts

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Fiscal Impact</strong></td>
<td><strong>($1.07 billion)</strong></td>
</tr>
</tbody>
</table>

(Stuit and Springer, 2010, p. 20)

Table 5

*Each California dropout increases incarceration costs by $374. The total annual impact is $1.4 billion*\(^7\)

<table>
<thead>
<tr>
<th>Dropout Population</th>
<th>3,800,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Dropouts Incarcerated</td>
<td>1.8%</td>
</tr>
<tr>
<td>Number of Incarcerated Dropouts</td>
<td>67,562</td>
</tr>
<tr>
<td>Average Correctional Cost Per Dropout</td>
<td>$863</td>
</tr>
<tr>
<td>Expected Incarcerations without Dropouts</td>
<td>38,302</td>
</tr>
<tr>
<td>Expected Average Incarceration Cost</td>
<td>$489</td>
</tr>
</tbody>
</table>

\(^7\) “Notes: Lochner and Moretti estimate that White high school graduates have a 0.77 percentage point lower probability of incarceration and Black high school graduates have a 3.39 lower probability of incarceration. Their sample is limited to males ages 20-60, so our calculation assumes the effect is constant across gender. Source: Author’s calculations. California Department of Corrections, Lochner & Moretti (2004), (Stuit, & Springer, 2010, p. 23).
California’s declining economic situation depicts a bleak outlook for high school dropouts. California has the second highest unemployment rate of U.S states, at 11.7 percent, as of June 17, 2011 (Nevada has the highest at 12.1 percent), (United States Department of Labor, 2011). According to projections by the Congressional Budget Office (CBO), the U.S. economy will not “recoup [jobs] that were lost ... [or] account for those needed to cover the growth in the labor force” (Allegretto, 2010, p. 4) until late 2015. The Center for Economic and Policy Research (CEPR) has a less optimistic perspective, projecting the U.S. economy will not account for the increasing labor force until approximately 2021. California’s outlook is even worse. The state had 13.9 million jobs as of June, 2010 – the same number of jobs as April, 1999. However, because of the increased labor force, the unemployment rate was 5.4 percent then, compared to today’s 12.1 percent (Allegretto, 2010).

As negative as these data and numbers are, they do not fully portray the scarcity of opportunities for high school dropouts. As Bloom (2010) notes, “Adjusted for inflation, the earnings of young men with no high school diploma dropped 23 percent between 1973 and 2006” (p. 91). In 2007, more than half of the 16 to 19 year-old dropout population had no paid

<table>
<thead>
<tr>
<th><strong>Average Fiscal Impact</strong></th>
<th>($374)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X 3.8 million High School Dropouts</td>
<td></td>
</tr>
<tr>
<td><strong>Total Fiscal Impact</strong></td>
<td>($1.42 billion)</td>
</tr>
</tbody>
</table>

(Stuit, and Springer, 2010, p. 23)
employment (Bloom, 2010). It is difficult to determine the degree to which this data represents a scarcity of opportunities or conscious decisions to not seek employment. However, occupations that are typically associated with minimal education are clearly on the decline. For instance, employment in California’s construction sector is down by 36.4 percent since the recession. Manufacturing jobs have been on the decline for some time, and those same jobs took an additional loss of 13.9 percent since the recession. These sectors account for over half a million lost jobs in California (Allegretto, 2010).

It is conceivable that the construction sector will experience some form of economic growth, assuming the housing industry bounces back and businesses invest at a higher rate. However, as the U.S. continues on an employment trajectory based on its current post-industrialization trend, the job market will increasingly necessitate higher levels of education. This makes the investment in education all the more urgent. In addition, a more educated workforce increases economic growth. As Dickens, Sawhill, and Tebbs (2006) assert, “A more educated labor force is more mobile and adaptable, [and] can learn new tasks and new skills more easily… It is also more autonomous and thus needs less supervision, and is more creative in thinking about how to improve the management of work” (p. 1). These qualities not only benefit businesses in terms of productivity but also provide a more educated population who in turn will create an environment that is conducive to attracting business and developing a stable business sector (Dickens et al., 2006).
Policy Background

California’s policy toward high school dropouts can be characterized as multifaceted, but not comprehensive. It consists of a myriad of programs that have come in and out of favor, and strategies that have been pieced together over time to address particular aspects of the dropout problem. These strategies include legal instruments, fiscal incentives, and technical support. Concerning legal instruments, the School Attendance Review Board (SARB) holds primary responsibility for compulsory education – “California law requires everyone between the ages of six and 18 years of age to attend school (Timar, Biag, and Lawson, 2007)” (there are exceptions to this, such as students who graduate prior to turning 18). The SARB has a state office that coordinates policies and provides training for County/local jurisdiction SARBs. The SARB does not enforce policy punitively – it is not state policy to do so - but rather works with districts to implement interventions (in the form of psychological services, medical services, etc.) to address truancy/dropouts. However, the mission of the agency is hampered by heavy workloads, insufficient resources, and lack of coordination (i.e. flow of information) between agencies and school districts. Moreover, interventions do not seem to address an important factor for dropping out, that is, a student’s sense that education is irrelevant to his/her life (Timar, Biag, and Lawson, 2007).

The state of California uses fiscal incentives, such as the calculation of average daily attendance (ADA) to determine district funding and to encourage districts to take an active role in reducing truancy and dropouts. Proponents of the policy argue that it incentivizes schools to improve attendance and retain low-performing students, as opposed to removing them for fear of
not reaching federal academic standards and test scores (e.g., No Child Left Behind). However, the policy does not, in itself, address the needs of potential dropouts and, “technically, the Pupil Retention Block Grant is the only state funding source that targets dropout prevention directly” (Timar, Biag, and Lawson, 2007). This block grant funds programs that provide additional, intensive instruction and/or counseling to students that are academically behind their peers. There is not enough data to accurately assess the impact of these intervention programs, however, some evidence suggests these programs, and the myriad of alternative schools (e.g. continuation schools, community day schools, opportunity schools, etc.), “are remedial and consist of little more than students filling in worksheets to satisfy ‘seat time’ for the program. Most alternative programs have very high rates of absenteeism and dropouts” (Timar, Biag, and Lawson, 2007).

Clients and Stakeholders

The primary clients are students and families in California from low-income, urban cities, who will participate in programs designed to reduce dropout rates. Their effort and willingness to comply with the program and policy will be the main determinant of its success. It is possible that some students and families will be skeptical of intervention efforts, or external matters (e.g., issues at home) will be too formidable to overcome. Schools (i.e., administrators, teachers, and counselors) are stakeholders in that they will be responsible for directly implementing programs,
designing curriculum, adjusting schedules as necessary, ensuring necessary staff are trained, selecting students for the program, etc. The degree to which teachers are trained and committed to the program and policy will be a key factor in galvanizing students/families. Administrators will need to maintain open lines of communication and support for teachers, for the sake of morale and compliance with the program and policy.

Districts are stakeholders in that they will be responsible for determining the scope of new programs (e.g., the number of students to be enrolled in the program), allocating resources to each participating school and held accountable for: 1) monitoring, recording, and reporting (to the state) results of the program, particularly regarding dropout rates; 2) initiating and reporting changes to the program, if necessary; and 3) ensuring the reduction of dropout rates. Policy makers, including the governor of California, state representatives, the California Department of Education, and school boards, are stakeholders in that they must assess the feasibility of effectively implementing and sustaining programs throughout the state’s school districts. In addition, they must ensure districts receive adequate instruction and resources to implement new programs and policies. California’s financial constraints may undermine efforts to implement programs or dilute the scope and effectiveness of programs. The state of California is a stakeholder in that decreased dropout rates/increased graduation rates improve the state’s economy by reducing costs, such as welfare (TANF), Medicaid, and incarceration, as well as create an environment conducive to a stable and progressive business sector.
Program Alternative #1: ALAS

ALAS (Spanish for “wings”) is an intervention program designed to address the social, psychological, and academic needs of middle and high school students. The principles of the program are based on research that links the likelihood of dropping out of school to the interplay of student, family, school, and community. To mediate these factors, students work directly with an assigned counselor or mentor who monitors students’ performance and acts as an intermediary between students, schools, families, and community resources. Counselors and mentors are comprised of schools’ existing staff, who are trained by ALAS staff. The major strategies of the program are as follows:

- *Monitor attendance.* Student attendance is monitored period-by-period, and students are required to make up missed school time. Parents are contacted daily about student truancy or extended absences.

- *Improve student social and task-related problem-solving skills.* During the first year of participation, ALAS students receive 10 weeks of instruction in problem-solving and self-control skills using the *ALAS Resilience Builder* curriculum.\(^8\) After the first year, participants receive follow-up instruction on behavior change.

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\(^8\) ALAS Resilience Builder is a supplementary curriculum, designed to improve students’ interpersonal skills through oral instruction and written activities (ALAS, 2009).
• **Provide feedback from teachers to parents and students.** Teachers provide weekly and, if needed, daily feedback through the counselor/mentor to students and parents about how students are doing with classroom behavior, assignments, and homework.

• **Teach parents how to participate in schools and how to manage their child’s behavior.** Parents are trained in parent-child problem solving and parent participation in schools. Parents receive instruction on how to reduce their child’s inappropriate behavior and promote desirable behavior.

• **Provide recognition and bonding activities.** ALAS students participate in social events set up within the program, where staff talk with parents to let them know their child met goals or improved behavior.

• **Connect students and families with community services.** ALAS staff helps students and parents use community and social services such as psychiatric and mental health services and alcohol and drug counseling (ALAS, 2009).

According to the What Works Clearinghouse (WWC)⁹ ALAS was implemented in 1990 as a pilot program in an urban junior high school from the Los Angeles Unified School District (LAUSD). A study of the program was conducted using ninety-four, at-risk, Latino students entering the seventh grade. The WWC assessed the study by three criteria:

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⁹ The What Works Clearinghouse is a resource for educators/education administrators, initiated by the U.S. Department of Education's Institute of Education Sciences. It applies rigorous standards to assess the research of educational programs, practices, policies, etc., with the intent of identifying the degree to which they are effective or reliable (Institute, 2006).
1. **Staying in School.** Based on measurements taken when the program ended (two years after it was initiated), “ALAS students were significantly more likely than control students to be enrolled in school (98% compared with 83%), (Institute, 2006)” Measures taken 2 years after the program ended found ALAS students remaining in school, compared to the control group, at 86% to 69% at the end of tenth grade, and 75% to 67% at the end of eleventh grade (Institute, 2006).

2. **Progressing in School.** At the end of ninth grade, ALAS students were on pace to graduate on time, compared to the control group, at 75% to 44%. At the end of tenth grade, 33% to 26% (Institute, 2006).

3. **Completing School.** ALAS students had higher graduation rates (at the end of 12th grade) compared to the control group, at 32% to 27% (Institute, 2006).

The aforementioned data shows a marked improvement in the academic performance of students in the program, as well as a trend of increased retention (staying in school). However, the drop off in numbers two years after the end of the program suggests the necessity to continue intervention throughout high school.

**Program Alternative #2: Career Academies**

Career Academies are designed to teach standard academic concepts (e.g., math, language arts, etc.) and provide work experience in the context of a career theme (e.g., healthcare, business/finance, technology, etc.), utilizing community partners, such as local
businesses to enhance the experience through internships, professional development, and other various forms of interaction. Career Academies function within high schools and involve sub-populations of students and existing teachers (the percentage of participants will vary by school). Hence, Career Academies are understood as a type of school-within-school program. The Career Academy model was initiated more than 30 years ago, targeting at-risk youth\(^\text{10}\) with the intent of reducing dropout rates and providing a bridge between high school and the workforce (Institute, 2006). This program alternative calls for an expansion of Career Academies, as the model already exists in approximately thirty-six high schools within Los Angeles Unified School District (Career, n.d.).

Implementation of Career Academies will depend on the desires and resources of each school, particularly regarding the selection of career themes, but the typical model involves the following:

- Schools (i.e., administrators, teachers, counselors) establish curriculum, schedules, standards, funding and community resources for the program.

- Students apply and are selected, based on prearranged criteria. As mentioned, these programs are typically targeted to at-risk youth.

\(^{10}\) There is a gradually increasing trend toward targeting career academies to motivated, college-bound students (Institute, 2006).
• Selected students are placed in cohorts (the same students and teachers work together for the duration of the program, or period, which can range from two to four years) based on grade level and career theme. Schools may offer one or multiple career themes.

• The program takes place within a portion of the school day; students still attend required and elective classes with the general student population.

• Students satisfy standard academic requirements within the duration of the program (Dayton, 2010).

A study conducted in 2000, of 1,764 students (of which 474 were considered at high risk of dropping out) throughout nine Career Academies in urban schools around the U.S., met the What Works Clearinghouse evidence standards and found the following, based on three criteria:

1. *Staying in School.* The sample of 474 high-risk students, compared to a control group, dropped out at a lower percent – 21% to 32% - based on measures taken after twelfth grade.

2. *Progressing in School.* The sample of 474 high-risk students, compared to a control group, had a higher percentage of students with sufficient credits to graduate – 40% to 26%.

3. *Completing School.* The study found “no statistically significant difference between the percentage of high-risk Career Academy and comparison youth who earned a diploma or GED certificate; 83% of the youth in both groups had either graduated with a diploma or received a GED (Institute, 2006).”
This data shows noticeable improvement in the retention and performance of at-risk youth. Although the study found no difference regarding school completion, the rate of 83% is an improvement over current graduation rates in California at 70.1% in 2009 (O'Connell, 2010). Moreover, there may be an added, unaccounted, economic benefit of Career Academies, in that they provide practical job experience regardless of achievement in an academic context.

**Anticipated Outcomes: ALAS and Career Academies**

It is important to note that although the participants from the ALAS research study were exclusively Latino, the program is intended for all ethnicities. Based on the aforementioned data, the likelihood of dropping out for program participants will decrease by twenty to thirty percent. When applied to the number of dropouts from the 2004-2005 ninth grade cohort from the Los Angeles Unified School District 2,770 students (California Department of Education, 2011), 544 to 831 students would be prevented from dropping out. Applying the numbers to the same cohort of dropouts from ninth to twelfth grade (2004 to 2008 school years – 11,909 students), (California Department of Education, 2011) 2,382 to 3,573 students will be prevented from dropping out. To summarize, the “As Is Condition,” using the number of dropouts in the Los Angeles Unified School District as an example, is 11,909 dropouts using 2004 to 2008 data (California Department of Education, 2011). If the program is implemented throughout the four-year time span, the number of dropouts will reduce to as low as 8,336 students. For Career Academies the “As Is Condition,” using the number of dropouts in the Los Angeles Unified School District as an example, is 11,909 dropouts over four years using 2004 to 2008 data.
(California Department of Education, 2011). Using the decreased dropout rate of 11% from the aforementioned data, the number of dropouts will decrease to approximately 10,600 students.

**Activities: ALAS and Career Academies**

ALAS developers have organized the program in three models – depending on the needs of each school. All three models utilize schools’ existing staff (i.e. teachers and counselors), who are initially trained by ALAS trainers. Follow up instruction is provided via internet and teleconferencing when needed.

1. *Subpopulation Model.* This model is intended for schools that generally perform well, but have an at-risk population of approximately twenty to thirty percent. The program’s intervention strategies are targeted to only those students. The program can be implemented immediately and developed throughout the school year.

2. *School wide Turnaround Model.* This model gradually expands the program from one cohort (e.g., students in ninth grade) to the next incoming cohort, until the entire school uses the program. The process takes three years.

3. *Resilience Builder Supplementary Model.* For schools that already have intervention models in place, the Resilience Builder component of ALAS is used as a supplement to further enhance students’ interpersonal skills. This can be implemented immediately, and developed throughout the school year (ALAS, 2009).
Regarding Career Academies, schools (i.e., administrators, teachers, and counselors) will be responsible for implementing Career Academies. The planning phase – establishing curriculum, schedules, standards, funding and community resources for the program – will take approximately one year. Within this time period, teachers will be selected, organized in teams, and trained for the new curriculum in approximately 6 months.

**Budget: ALAS and Career Academies**

According to the What Works Clearinghouse, ALAS will increase per pupil costs by an estimated $1,185 - not for the entire student body, but those participating in the program – using data from 2004 (Institute, 2006). This will result in an approximate per pupil cost of $10,685 compared to the current cost of $9,500 (Westchester Parents, 2010) in the Los Angeles Unified School District. For an average high school approximately 8,500 students (Los Angeles, n.d.) in the Los Angeles Unified School district, yearly costs will be as follows:

<table>
<thead>
<tr>
<th>Percentage of Students in the Program</th>
<th>Additional Yearly Cost (in dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>1,007,250</td>
</tr>
<tr>
<td>20</td>
<td>2,014,500</td>
</tr>
<tr>
<td>30</td>
<td>3,021,750</td>
</tr>
</tbody>
</table>
According to the What Works Clearinghouse, Career Academies will increase per pupil costs by an estimated $600 - not for the entire student body, but those participating in the program – using data from 2004 (Institute, 2006). This will result in a per pupil cost of $10,100, compared to the current cost of $9,500 (Westchester Parents, 2010) in the Los Angeles Unified School District. Considering the typical Career Academy enrolls 100 – 400 students (Dayton, 2010), this will be an increase of $60,000 to $240,000 a year for participating schools.

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<table>
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</thead>
<tbody>
<tr>
<td>40</td>
<td>4,029,000</td>
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<tr>
<td>50</td>
<td>5,036,250</td>
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<tr>
<td>60</td>
<td>6,043,500</td>
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<tr>
<td>70</td>
<td>7,050,750</td>
</tr>
<tr>
<td>80</td>
<td>8,058,000</td>
</tr>
<tr>
<td>90</td>
<td>9,065,250</td>
</tr>
<tr>
<td>100</td>
<td>10,072,500</td>
</tr>
</tbody>
</table>

**Evaluation**
These policy and program alternatives were selected based on the following criteria:

- **Ranking** within the criteria of the What Works Clearinghouse (based on improvement index\(^{11}\) and evidence rating\(^{12}\); for dropout prevention. This criteria was selected for its rigorous appraisal of program effectiveness.
  
  o ALAS has an improvement index of +42 and evidence rating of “Potentially Positive Effects\(^{13}\): evidence of a positive effect with no overriding contrary evidence (Institute, 2006).”
  
  o Career Academies have an improvement index of +13 and evidence rating of “Potentially Positive Effects\(^{14}\): evidence of a positive effect with no overriding contrary evidence (Institute, 2006).”

- **Cost.** Of the top five programs, in terms of improvement index, Career Academies and ALAS have the second and third lowest additional per pupil cost, respectively (Institute, 2006). In terms of logistics, both alternatives require systemic changes within the school. However, the changes for ALAS may be less invasive because the program is a supplement, and does not require the degree of curriculum and scheduling changes, or

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11 Improvement index is the “difference between the percentile rank of the average student in the intervention group and percentile rank of the average student in the comparison group. It can take on values between -50 and +50, with positive numbers denoting results favorable to the intervention group (Institute, 2006).”

12 Evidence rating “Considers four factors: the quality of the research design, the statistical significance of the findings, the size of the difference between participants in the intervention and the comparison conditions, and the consistency of evidence across studies (Institute, 2006).”

13 Out of six categories for evidence rating, this is the second highest.

14 Out of six categories for evidence rating, this is the second highest.
coordination with community partners, that Career Academies require. Moreover, Career Academies can typically admit only 100-400 students, while ALAS has the capacity for school-wide implementation. However, the counselor/mentor component of ALAS may be taxing on human resources, depending on the number of students in the program.

- **Theory and Research.** Many notable academics on the issue of dropout prevention, such as Russell Rumberg of the California Dropout Research Project, assert that comprehensive interventions (i.e., interventions that address psychological, social, community and academics) are most effective for addressing the dropout issue. Moreover, interventions that are implemented early, at the first signs of trouble (e.g. poor attendance, disruptive behavior, and weak academic performance) have a better likelihood of preventing dropouts.

ALAS was developed with these principles in mind, and the program is flexible enough to be implemented in high schools and middle schools. Career Academies do not adhere to these principles, but may benefit students and the community by providing a practical alternative to students who have no interest in pursuing education after high school. In addition, Career Academies have been in place for more than three decades. The practical evidence and experience supporting Career Academies is more substantial than that for ALAS.
Recommendation

Investing in education is understandably a contentious issue, especially given California’s economic crisis and a political context in which long term investments rarely appease constituents. In fact, the state of California is expecting a 19 billion dollar shortfall for the fiscal year 2012-2013 which has obvious implications for the state, local governments, and public education. However, the consequences of allowing California’s urban youth – particularly Hispanics and African Americans – on a trajectory towards failure have been mounting for some time. For the state, the consequences manifest into lost tax revenue and higher welfare costs, Medicaid, and incarceration costs that reach billions of dollars each year. For the individuals and their communities, the consequences manifest into a culture of underachievement, relative apathy, and dependence on the state. The evolution of the job market, toward post-industrialization, stands to make the problem worse. Sectors that typically require minimal education, such as construction and manufacturing, are on the decline and may never return enough to meet job market demand. A failure to invest in education will only result in greater socio-economic losses down the line.

This research shows direct gains in graduation rates from interventions applied at the early stages of academic and/or social problems. Thus, ALAS is the more desirable program/policy alternative. It has some glaring drawbacks, such as a higher additional per pupil cost and a lack of implementation at the high school level, for evaluation purposes, compared to Career Academies. Also, ALAS does not currently have a component for the elementary school
level. Nevertheless, its positive effect on student retention falls in line with research that suggests early intervention, particularly intervention that addresses the multiple spheres of students’ lives (psychological, family, community, etc.), is the most effective approach toward reducing dropout rates. This represents a significant economic savings to local governments and the State of California.

With that in mind, it is recommended to implement ALAS at the middle school level as well. For optimal effectiveness, enrollment in the program should not be limited by a particular number of years – students should be granted enrollment on an as-needed basis. If this is not economically feasible to do on a large scale, ALAS is flexible enough to be targeted to solely at-risk youth (i.e., students that demonstrate moderate to severe signs of poor academic performance and/or behavior) or students who need the program to sustain academic improvement. The flexibility of the program may be valuable if schools are given discretion to utilize the program for students who clearly respond to it, and discontinue for students who do not. This may raise issues of equity. However, in the context of limited resources, it is an option worth bearing in mind.

**Acronyms**

CDE  California Department of Education  
IES  Institute of Education Sciences  
USDL  United States Department of Labor  
USCB  United States Census Bureau
References


Timar, T., Biag, M., and Lawson, M. (2007). Does state Policy help or hurt the dropout problem in california?. Informally published manuscript, Center for Applied Research in

