### Career Academies

### A Proven Model to Prepare Students for College and Careers

**David Stern** 

Career Academy Support Network (CASN) UC Berkeley Graduate School of Education

Prepared for presentation to NASDCTEc National Career Clusters Institute June 19, 2012

#### **About CASN**



- CASN works with secondary schools to improve students' preparation for college and careers
- Provides on-site support for development and improvement of career academies and other small learning communities, in California and other states
- Has created 2 websites with guides, research reports, national directory of academies, "toolbox" of downloadable materials, videos, and more

http://casn.berkeley.edu

http://collegetools.berkeley.edu



### Today's Agenda

- What's so great about career academies?
- How do career academies deliver career and technical education?
- What are key features of career academies that require support from state and local administrators?

### What is a career academy?

SLC:

Cohort scheduling

Teacher team

2 to 4 years

Curriculum
blends
college
prep with
CTE
sequence

Work-based learning

### **Brief history**

- 1969: first Philadelphia academy
- 1981: replication in California
- 1982: replication in New York City, leading to National Academy Foundation (NAF)
- 1985: California begins funding Partnership Academies (CPAs)
- 2012: now about 5000 to 7000 career academies nationwide, including about 400 CPAs and 500 NAF

### Solid research evidence

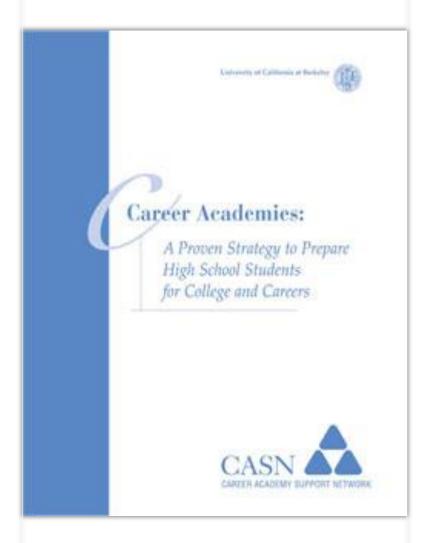
- Studies have followed students through high school, comparing academy students with similar students at the same school
- Academy students show more improvement in attendance, grades, credits earned, and are more likely to stay in high school
- Academy students have better postsecondary outcomes
- MDRC random-assignment study found positive effects on earnings 8 years after high school, with no reduction in postsecondary educational attainment

### Impact on earnings

Eight years after high school, MDRC found students assigned to career academies earned 11 percent more than non-academy students.

For males, the difference was 17 percent — nearly \$30,000 over eight years.

### Summary of research and history available free at http://casn.berkeley.edu

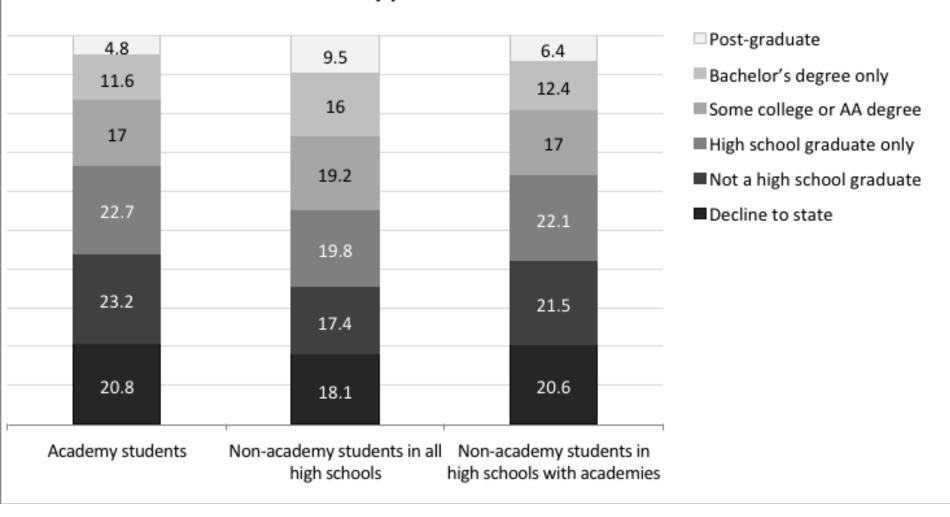


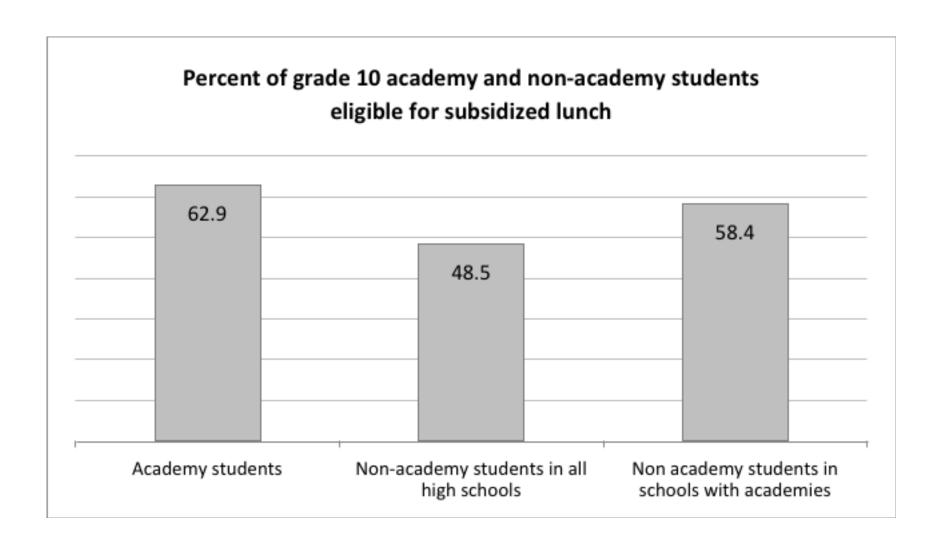
## Recent findings in California

- By law, at least half the students entering California Partnership Academies (CPAs) must have high-risk characteristics
- But in 2010, graduation rate for CPA seniors was 95%, compared to 85% statewide
- 57% of CPA graduates in 2010 met "a-g" course requirements for admission to University of California or California State University

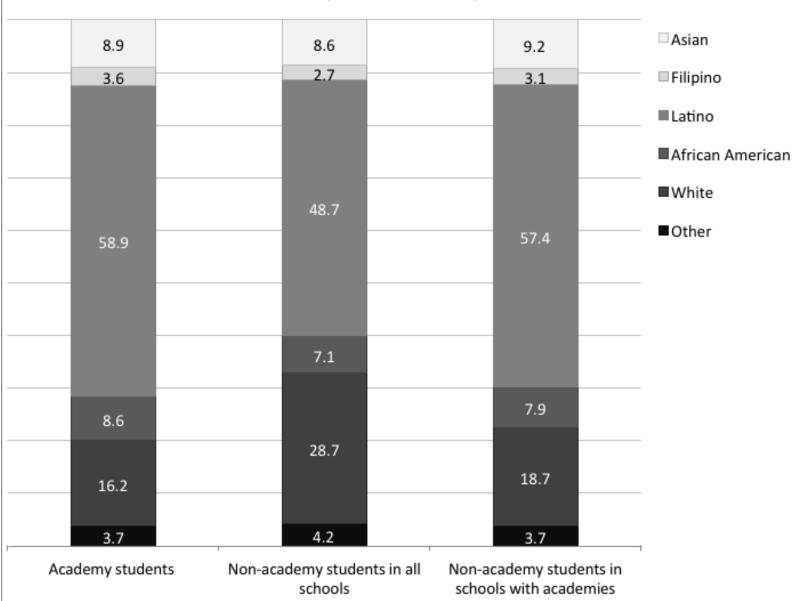
Source: Profile of California Partnership Academies 2009-10, at http://casn.berkeley.edu

#### Percent of grade 10 academy and non-academy students by parents' education



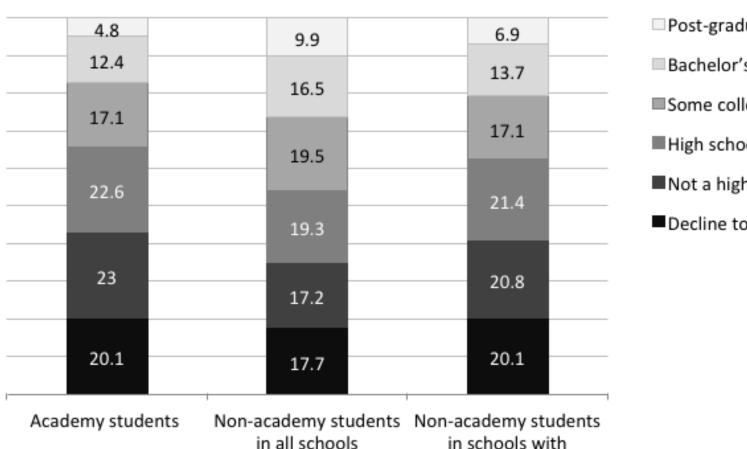


#### Percent of grade 10 academy and non-academy students by race or ethnicity

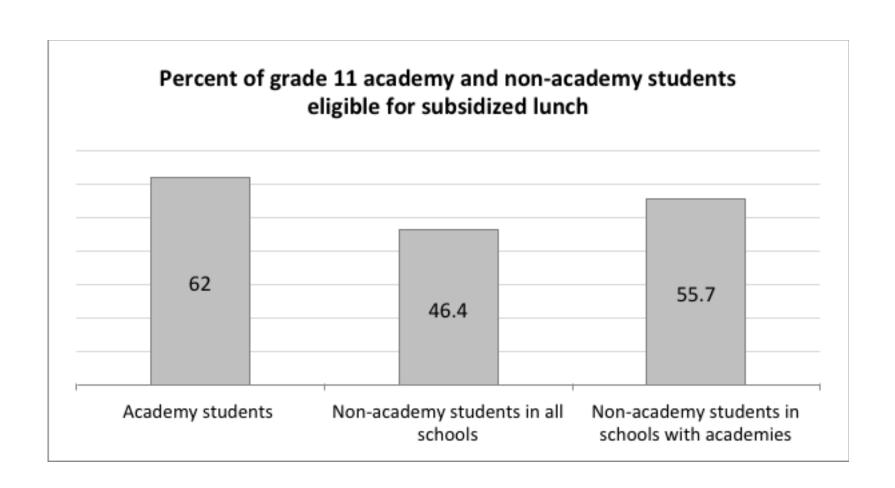


#### Percent of grade 11 academy and non-academy students by parents' education

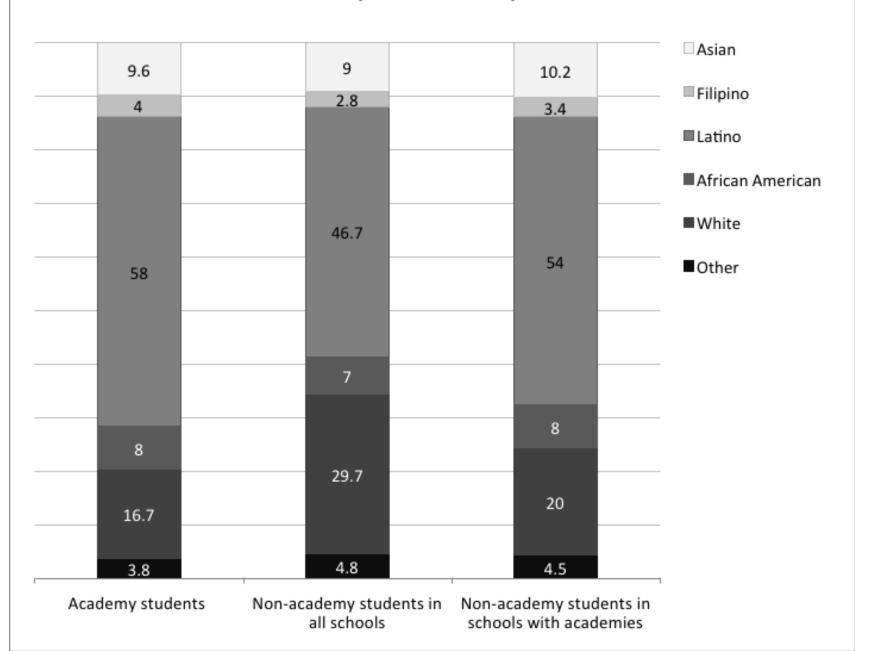
academies



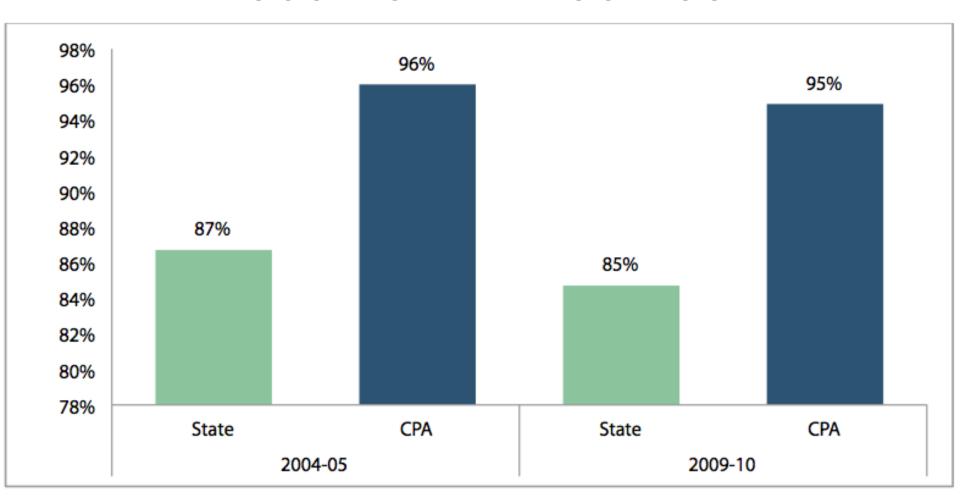
- Post-graduate
- ■Bachelor's degree only
- ■Some college or AA degree
- ■High school graduate only
- ■Not a high school graduate
- Decline to state



### Percent of grade 11 academy and non-academy students by race or ethnicity



### CPA and California 12th-grade graduation rates, 2009-10 and 2004-05



# Fiscal benefit for California State and local taxpayers of one more high school graduate

Discounted present value of lifetime benefit for one additional graduate, age 20 in 2005:

- \$25,840 additional tax payments
- +29,510 reduced health expenditures
- +21,370 reduced crime expenditures
- +3,700 reduced welfare expenditures
- = \$80,420 total benefit to State and local taxpayers
- ~ \$93,229 in 2010 dollars

Source: Clive R. Belfield and Henry M. Levin: *The Economic Losses from High School Dropouts in California* (UC Santa Barbara: California Dropout Research Project, August 2007)

### Higher graduation rate of CPA seniors repays State + local cost

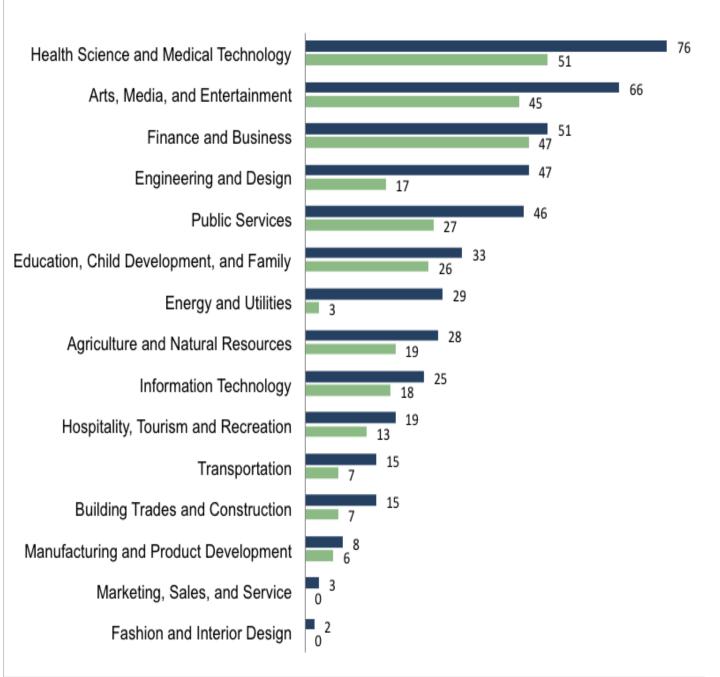
CPAs enrolled 12,132 seniors in 2009-10. Senior graduation rate was 10% higher in CPAs than statewide, so 1,213 more CPA seniors graduated than would have graduated at the statewide rate. If 728 seniors graduated because they were in CPAs, the benefit they generated would exceed total taxpayer cost  $(728 \times $93,229 > $67,814,732).$ 

### **Additional benefits**

In addition to fiscal benefit to State and local taxpayers, Belfield and Levin also calculate other benefits from one more h.s. graduate (present value of lifetime benefits at age 20 in 2005): \$115,300 net benefit to Federal government \$188,640 additional after-tax earnings \$79,890 reduced cost to crime victims, etc. These greatly exceed benefit to California taxpayers (\$80,420 in 2005 dollars).

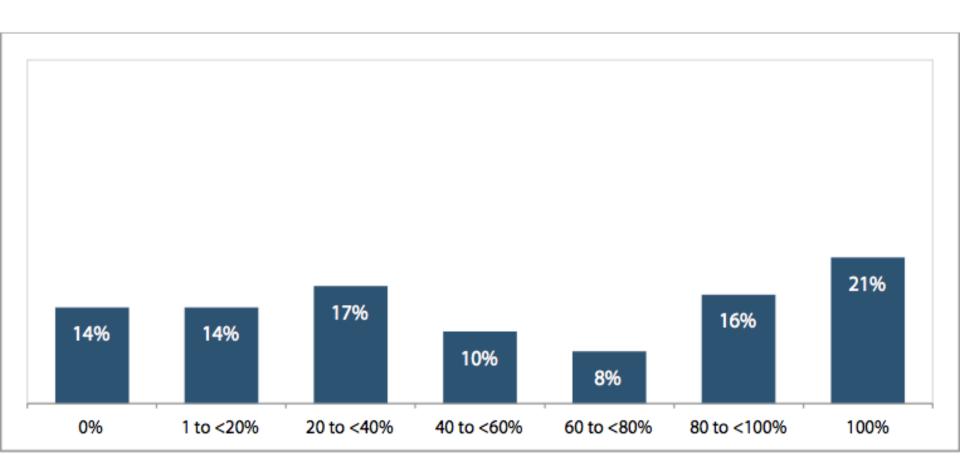
### Career academies and CTE

- Since 1980s, vocational education (VE) has evolved to career-technical education (CTE)
- VE was defined as preparation for occupations not requiring a bachelor's degree, but now CTE is part of preparation for postsecondary education
- 1990 Perkins Act: "integrate" VE and academics; 2006
   Perkins Act changed name and definition
- Career academies have provided a model for how to combine college and career preparation

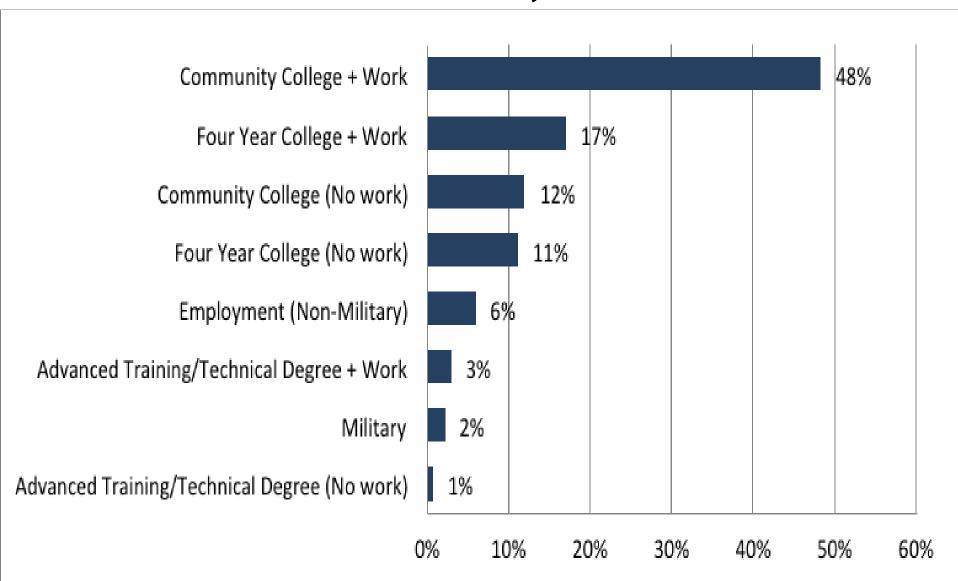


### Number of CPAs by industry sector, 2009-10 and 2004-05

# CPAs by category according to the reported percentage of seniors who had internships, 2009-10



### Postsecondary plans of CPA seniors, 2009-10



# Career academies and Linked Learning

- James Irvine Foundation started "multiple pathways" initiative, renamed Linked Learning (LL) in 2009
- 10 districts funded through ConnectEd California
- 4 defining features: college-prep academics, CTE sequence, work-based learning, student support
- Career academies are most common form of LL
- Other forms: self-contained small schools, semiautonomous schools sharing a campus

## National standards for career academies <a href="http://www.ncacinc.com/">http://www.ncacinc.com/</a>

- Defined Mission & Goals
- Academy Structure
- Host District & High School
- Faculty & Staff
- Professional Development

- Governance & Leadership
- Curriculum & Instruction
- Employer, Higher Ed & Community
   Involvement
- Student Assessment
- Cycle of Improvement

#### Administrators' role

- Student recruitment
- Scheduling
- Teacher team
- Advisory committee

### Student recruitment

For a California Partnership Academy, at least half the students each must meet at least 3 "at risk" criteria:

- (1) Past record of ... absence from school 20 percent or more of the school year. (2) Past record of underachievement in which the pupil is at least one-third of a year behind the coursework for the respective grade level, or as demonstrated by credits achieved. (3) Past record of low motivation or a disinterest in the regular school program.
- (4) Disadvantaged economically. (5) Scoring below basic or far below basic in mathematics or English language arts ...
- (6) Maintaining a grade point average of 2.2 or below, or the equivalent of a C minus. (SB1354)

### Scheduling

- Each year academy students take a set of academic and CTE classes together. California Partnership Academies include 3 academic classes in grades 10 and 11, and at least one academic class in grade 12.
- In grades 10-12, academy students take at least one CTE class together. The CTE classes should be a sequence related to the academy theme, qualifying as part of a Program of Study. Examples are on CASN website.

## Why "pure" academy classes?

- "Pure" means only academy students are in academy classes. California requires that "Classes in the academy program shall be limited to academy pupils."
- Coherence: Having the same set of students take classes together enables teachers in those classes to create lessons and projects that bridge different disciplines and make the curriculum more coherent
- Cohesion: Taking several classes together builds cohesion among students and teachers

#### **Teacher team**

- California requires "Academy teachers shall work as a team in planning, teaching, and troubleshooting program activities."
- One teacher takes coordinating role, may have release time
- Planning time is essential
- Common prep period is very helpful, though difficult to schedule

### **Advisory committee**

- California requires "Each participating school district shall establish an advisory committee consisting of individuals involved in academy operations, including school district and school administrators, lead teachers, and representatives of the private sector."
- Helps raise funds or in-kind contributions required to match state grant
- Helps find guest speakers, mentors, internships
- Helps connect curriculum to real work