Examining the Long-term Academic and Employment Impacts of the Academy for College Excellence: A Mixed Methods Study

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Strengthening Student Success conference
San Francisco, CA
October 11, 2017
The RP Group

Mission
• Strengthen CCCs’ ability to gather, analyze, & act on information in order to enhance student success

Services
• Research, evaluation, planning, professional development, & technical assistance—designed & conducted by CCC practitioners

Organization
• 501(c)3 with roots as membership organization
  www.rpgroup.org
Session Objectives

Attendees will:

1) understand and discuss the ACE model, its target populations, curricula, and student outcomes;

2) understand the study’s research design, differentiating between quantitative and qualitative methods; and

3) discuss the implications of this research for helping to ensure equitable outcomes for underrepresented students.
Academy for College Excellence
ACE to you!
Academy For College Excellence

To prepare students, particularly those who have experienced academic and personal setbacks, to navigate and succeed in college, work, and life.

• Provides “support through curriculum and instruction that holistically addresses students’ needs”
• Can be scaled, sustained, and replicated to serve different types of learners
  – Basic skills, transitioning, CTE, and college-ready students
• Helps students hone their ability to self-manage and prepare for life’s stressors
• Designed to foster intrinsic engagement and motivation among community college students
The ACE Model

ACE Foundation Course
Two-Week Intensive
Affective Orientation
3 semester credits

http://academyforcollegeexcellence.org/
The ACE Model

ACE Foundation Course
Two-Week Intensive
Affective Orientation
3 semester credits

ACE Team
Self-Management
Course
2 semester credits

http://academyforcollegeexcellence.org/
The ACE Model

ACE Foundation Course
Two-Week Intensive
Affective Orientation
3 semester credits

ACE Team
Self-Management
Course

2 semester credits

Project Based
Social Justice
Research
Course

Accelerated
English

Pre-Stats
Math

Career
Planning

Computer
Applications

http://academyforcollegeexcellence.org/
<table>
<thead>
<tr>
<th>2003-2014 ACE Students 2,900+</th>
<th>Survey Respondents (n=435)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 26% were identified as high risk*</td>
<td></td>
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<tr>
<td>• Non-CTE Group (N = 2,746)</td>
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<tr>
<td>▪ 56% male</td>
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<tr>
<td>▪ 63% Hispanic</td>
<td></td>
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<tr>
<td>▪ 19% White</td>
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<tr>
<td>• CTE Group (N = 236)</td>
<td></td>
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<tr>
<td>▪ 81% female</td>
<td></td>
</tr>
<tr>
<td>▪ 32% Hispanic</td>
<td></td>
</tr>
<tr>
<td>▪ 37% White</td>
<td></td>
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<tr>
<td>• 23% were identified as high-risk*</td>
<td></td>
</tr>
<tr>
<td>• Equal portions male / female</td>
<td></td>
</tr>
<tr>
<td>- Hartnell: 60% female / 40% male</td>
<td></td>
</tr>
<tr>
<td>• 56% Hispanic</td>
<td></td>
</tr>
<tr>
<td>• 21% White</td>
<td></td>
</tr>
<tr>
<td>• 4% African-American</td>
<td></td>
</tr>
<tr>
<td>• 45% under 20 years old</td>
<td></td>
</tr>
<tr>
<td>• 45% between 20 and 39</td>
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<tr>
<td>- Hartnell respondents were more likely to be 25 to 39</td>
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</tbody>
</table>

* ACE defines high-risk students as those who identify with 80% of 19 risk factors (e.g., gang involvement, child abuse, mental conditions).
Personal Success Skills

• Purpose and Direction
• Self-Awareness & Self-Discipline
• Communication with Others
• Working Styles
• Project-Based Research (Social Justice Research Course)
Writing Sprint

Why is it important to learn to create an emotionally safe environment in your classroom?
The Amygdala

Bio-Reaction

Stimulus! → Amygdala Senses Threat → Bio-reactive Response!

- Fight
- Flight
- Freeze
- Appease
The Amygdala & Cortex

Think / Reason / Discern

Cortex

Fight / Flight / Freeze / Appease

Amygdala

Bio-reaction: Your Experience

• Have you ever had a bio-reaction?
• Have you had a bio-reaction in the last 24 hours?
• Why is it important for our students to be aware of their bio-reactions?
  – Any examples?
Bio-Reaction

Stimulus!

Amygdala Registers Threat

Bio-Reactive Response:
- Fight
- Flee
- Freeze
- Appease

Choice

Aware?

Yes

Valuable Discussion

No

Fearful Explanation

Automatic Response

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Bio-reaction: Reflection

- What did you learn from this exercise?
- What surprised you?
- Why is the concept of bio-reaction important for your students to know?
The Study

Qualitative & Quantitative Analyses
ACE Study Context

Personal Success Skills (aka Professional Skills):

- Are these skills important to student’s education, career and personal success?
- Can these skills be taught effectively?
- Can these skills be taught in a way that students apply them immediately to their lives & that they have a lasting effect?
- Are these skills important to students years later?
- Do these skills have economic value?
- Do students state that these skills positively impacted their professional and personal lives?
ACE Study Context (continued)

• Compared to a statistically equivalent comparison group, what is the impact of ACE on:
  – Academic outcomes such as certificate/degree completion, transfer to a four-year institution, completion of a transfer level English or Math courses
  – Annual median wages pre-ACE term of enrollment and post-ACE (up to six years)
Research Overview

The findings!
Methodology: Qualitative

• 400+ telephone surveys with former ACE students from:
  1. Berkeley City
  2. Cabrillo
  3. Hartnell

• Employer interviews and online student focus groups planned, but received limited response
Primary Education Goals

- 41% wanted to **earn a certificate or degree and transfer** to a four-year institution
- 23% wanted to **learn how to be a successful college student** or determine if wanted to continue their postsecondary education
- 20% wanted to **earn a certificate or degree, without transferring** to a four-year institution
Highest Ed Level Attained

- 54% selected “some community college”
- 23% earned an associate's degree
- 9% completed an industry certification or state/professional license
- 9% earned a bachelor’s degree
- 1% earned a graduate degree
Ed Goal vs. Ed Level

The group who had achieved “some community college” included:

- Over **two-thirds (68%)** of those with a **goal to be successful college student**
- Nearly **three-fourths (73%)** of those who desired to **take classes for self-enrichment only**
- Over **half (54%)** of those who **wanted to earn a certificate or degree and transfer**
Methodology: Quantitative

• 2,982 former ACE students' academic and earnings outcomes were compared to a statistically-equivalent group (one-to-one match)
  – Propensity Matching Analysis using 22 variables
  – Two cohort types: CTE and Non-CTE

• Data from three CA community colleges
Academic Outcomes

1. Successful completion of transfer-level math
2. Successful completion of transfer-level English
3. Completion of 30 transfer-level units
4. Completion of a degree or certificate
5. Transfer to a four-year institution
6. Transfer preparedness (earned 60+ transferable units with a 2.0+ GPA)
Academic Outcomes

• 3-year rates: Control > ACE on all outcomes
• 6-year rates: Control = ACE on most outcomes

ACE appears to have a positive impact for high-risk student populations – helping them achieve success at rates similar to the general student population
Academic Outcomes

Students who completed the Accelerated ACE Model were at least 2X more likely than their matched peers to:

- Complete a transfer-level English course
- Complete a transfer-level math course
- Earn an award
- Earn 30 units within three years of enrolling in ACE
Academic Outcomes

A higher percentage of ACE nursing students earned a degree/certificate within three and six years than nursing students who did not have an ACE Foundation course in their first year.
Employment & Career

Prior to ACE participation:

• 54% employed in full- or part-time work
  – 33% earning <$15,000 annually
  – 29% were earning between $15- $19,999K
  – 17% were earning $20-$24,999K
  – 14% were earning between $25-$49K

• 46% unemployed
Employment & Career

At the time of the interview:

• **79% employed**
  – Primarily in entry-level positions
• About 60% currently employed at **one versus multiple jobs**
• 22% earning minimum wage (< $20K annually) vs. 62% prior to ACE
• 21% unemployed
Wage Outcomes

Indicators

• Annual and median wage earnings

Data Source

• EDD wage data
  – Match rates ranged from 44% to 100%
Wage Outcomes

• Began and continued to have lower wages over time vs. comparison group
• Wage gains from one year before ACE to six years after ACE were significantly greater for ACE participants vs. control group
  – 107% annual mean wage gain for control group
  – 200% annual mean wage gain for ACE
Comparison of Annual Median Wages Over Time for URM Students: ACE vs. Matched Peers

<table>
<thead>
<tr>
<th></th>
<th>Before Term</th>
<th>1 year after</th>
<th>2 years after</th>
<th>3 years after</th>
<th>4 years after</th>
<th>5 years after</th>
<th>6 years after</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACE URM</strong></td>
<td>$4,645</td>
<td>$5,027</td>
<td>$7,790</td>
<td>$10,577</td>
<td>$12,942</td>
<td>$15,948</td>
<td>$18,828</td>
</tr>
<tr>
<td><strong>Control URM</strong></td>
<td>$6,526</td>
<td>$8,061</td>
<td>$10,597</td>
<td>$13,085</td>
<td>$15,198</td>
<td>$17,346</td>
<td>$19,372</td>
</tr>
</tbody>
</table>
Influence of Personal Success Skills

- **Purpose and direction** - most positive influence on students’ lives, particularly in the area of work

- **Self-awareness and self-discipline** - pause and regain perspective in work and personal interactions

- **Collaborative Leadership Skills / communication skills** - broke down work / personal communication barrier

- **Working styles** - critical to job performance and personal relationships

- **Social justice research course** - positive influence on “how to contribute effectively to a [work] team”
Overarching Findings

Most respondents:

• Reported that ACE had positively influenced their work (90%) and personal lives (86%)

• “Agreed” or “strongly agreed” that personal success skills had a positive influence on their work and personal lives (ranged from 75% to 92%)
Overall Outcomes

For historically-underrepresented, first generation, and “at-risk” students, ACE:

- Teaches and hones **technical and affective skills** for more effective management of major financial / familial-personal / social stressors
- Builds **confidence in ability** to be a successful student and professional
- Promotes **postsecondary education as a tool** for personal and economic success
- Ensures effective **navigation of and success in the college / professional environment**
- Increases **award and transferable English and math completion, and wages** (when compared to control group)
- Strengthens **CTE pathways**
Conclusions

The ACE Program regardless of variation:

• Supports students’ academic and social integration in higher education

• Delivers psychosocial supports for underserved and underrepresented college students

• Inspires pursuit of additional education – why some students felt they would realize their career goals

• Teaches students to work effectively in a team

• Includes affective elements that positively influence students’ work and personal lives
Conclusions (continued)

• The addition of a Foundation course to a career technical program (CTE) such as nursing appears to enhance academic and wage outcomes for nursing students.

• Participation in ACE for high-risk student populations helps them attain academic and wage outcomes comparable to the general student population.

• Participation in ACE boosts potential in earnings over time for all students, but especially for males of color and underrepresented minorities.
Reflections

Based on what you have learned here, how would you change the way you are working with students?

- Those who are underprepared
- Those who are prepared
Q & A
Thank you!

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