UCR P-20 Regional Alliance

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for P-20 at the Center

May 14, 2010
Outline

• Our region
• Our partners (internal and external)
• Our work
Our Region

The Inland Empire of Southern California:

<table>
<thead>
<tr>
<th></th>
<th>Riverside</th>
<th>San Bernardino</th>
</tr>
</thead>
<tbody>
<tr>
<td># districts</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td># K-12 students</td>
<td>420k</td>
<td>420k</td>
</tr>
<tr>
<td>Demog. (Hispanics / Afr. Am.)</td>
<td>56% / 8%</td>
<td>57% / 10%</td>
</tr>
</tbody>
</table>

You are here!
Mission

Increase college-going rate and persistence through:

• Strategic internal and external partnerships;
• Systemic school change;
• Increased student interest and achievement in *math and science*;
• Increase student awareness of college options;
• Teacher professional development.
Our Regional Partners (non K-12)

- Focus on creating K-12 pathways to college and career
- Help to access school districts.
- Strong connection to business partners.

Alliance for Education (SB)

Education Coalition for Hire Opportunities (R)

Coachella Valley Economic Partnership (R)
Internal faculty partners: leverage academic expertise and facilitate access

UCR Graduate School of Education

• Educational theoretical framework with focus on minority students.
• Work on research topics:
  • Issues related to access of minority students in STEM disciplines;
  • Nature of Science: what it is and how it is implemented in K-16 curriculum in practice.
• Collaboration on assessment and evaluation in grant proposals.
• Collaboration on access to K-12 schools.

Reba Page  Marsha Ing  Lindsay Malcom  Sara Casto-Olivo  Robert Ream
More internal faculty partners: facilitate faculty interest in educational engagement

UCR CNAS and BCOE

- Teacher professional development academies on STEM content;
- Research opportunities for K-12 teachers and students in UCR labs;
- Opportunities for undergrad and grad students to teach in K-12 schools;
- Facilitate faculty engagement with K-12 schools;
- Collaboration on grant proposals (this year: 3 submitted, 3 in pipeline)
- Implementation of new education tracks (physics)

Harry Tom (Physics) Rich Cardullo (Biology) Kim Hammond (Biology) Mary Droser (Geology) David Kisailus (Env. Engin.) Matt Barth (Elec. Engin.)
Our Programs:
Raising the College-Going Rate in the Inland Empire

General Initiatives:

- Serving multiple education entities; no longitudinal tracking.
- Professional development for teachers in grades 4-16 (211)
- Summer programs for students in grades K-12 (139)
- Special events (1026)
- Undergraduate students apprenticeship (38)
Our Programs:
Raising the College-Going Rate in the Inland Empire

Special services:
Other services provided to generate funding sources for ALPHA and strengthen partnerships

• Grant writing
• Evaluation
• Partnership with internal outreach partners (EAOP and MESA)

Pam Clute
Linda Braatz-Brown
Maria Simani
Our Programs:
Raising the College-Going Rate in the Inland Empire

Targeted Interventions:
Serving systematically specific schools and/or school districts; data sharing agreements in place; research and evaluation.

• Summer Advancement Academies (145)

• College-Going Initiative (1936)

• School University Partnership (18 undergrad, ~700 MS&HS students)

• NSF Noyce Program (11 undergrad and grad students)
## Summer Advancement Academies
(challenge with data tracking…)

<table>
<thead>
<tr>
<th>Year</th>
<th># students</th>
<th>Data Tracking per Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>~200</td>
<td>N/A</td>
</tr>
<tr>
<td>2006</td>
<td>~85</td>
<td>100% letter grade data for 06-07&lt;br&gt;100% letter grade data for 07-08&lt;br&gt;90% CST scores in subject matter</td>
</tr>
<tr>
<td>2007</td>
<td>105</td>
<td>100% letter grade data for 07-08&lt;br&gt;86.9% CST scores in subject matter</td>
</tr>
<tr>
<td>2008</td>
<td>116</td>
<td>100% letter grade data for 08-09&lt;br&gt;No CST</td>
</tr>
<tr>
<td>2009</td>
<td>53 + 92</td>
<td>100% letter grade data for 09-10 (1 school only)</td>
</tr>
</tbody>
</table>

New administration may help 4-year data gathering

District supported + enrolled in TES
### SAA - Algebra 1 classes

<table>
<thead>
<tr>
<th></th>
<th>2006 Cohort</th>
<th>2007 Cohort</th>
<th>2008 Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAA</td>
<td>N = 47</td>
<td>SAA</td>
<td>N = 55</td>
</tr>
<tr>
<td>Non-SAA</td>
<td>N = 567</td>
<td>Non-SAA</td>
<td>N = 632</td>
</tr>
<tr>
<td>Passing 1st semester</td>
<td>67.6%</td>
<td>72.7%</td>
<td>70.5%</td>
</tr>
<tr>
<td>Passing 2nd semester</td>
<td>47.7%</td>
<td>54.5%</td>
<td>45.6%</td>
</tr>
</tbody>
</table>

- Consistent better performance compared to school average
- Significant differences across Non-SAA students
- 2007 cohort particularly “good crop” (see next slide)
- Note: no significant differences for geometry classes…

![SAA - Algebra 1 classes](image-url)
The same test was administered in both academies cohort. Only students with both pre and post test included.

**Outcome comparison:** students with at least 50% post-test correct answers:
- 2007 cohort (34 students) = 70.4%
- 2008 cohort (54 students) = 43.7%

**Findings:**
50% of students in the 2008 cohort were taught by sub-teachers for 7 months in 8th grade.

**Intervention:**
All students from the same 8th grade classes with low scores were placed together in math classes. (SAA great diagnosis tool)
### SAA 2006 cohort summary (as of 2008)

<table>
<thead>
<tr>
<th>% students (N = 85)</th>
<th>Math Academic Status</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>32.9%</td>
<td>Advanced</td>
<td>Passed ALG 2 by 10th grade</td>
</tr>
<tr>
<td>15.9%</td>
<td>On-track</td>
<td>Passed GEO by 10th grade</td>
</tr>
<tr>
<td>4.5%</td>
<td>On-track</td>
<td>Failed to pass ALG 2</td>
</tr>
<tr>
<td>10.2%</td>
<td>Close</td>
<td>Passed ALG 1 by 10th grade</td>
</tr>
<tr>
<td>13.6%</td>
<td>Close</td>
<td>Failed to pass GEO</td>
</tr>
<tr>
<td>4.7%</td>
<td>NOT on track</td>
<td>Failed to pass ALG 1</td>
</tr>
<tr>
<td>18.2%</td>
<td>DROP</td>
<td></td>
</tr>
</tbody>
</table>

- 77% passed Algebra 1 by 10th grade (34.4% school average)
- 53% are on-track with “a-g” requirements (21.5% school average)
- Math CST scores 5.2% higher than school average.
### SSA 2007 cohort summary (as of 2008)

<table>
<thead>
<tr>
<th>% students (N = 55)</th>
<th>Math Academic Status</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.2%</td>
<td>Advanced</td>
<td>Passed GEO by 9th grade</td>
</tr>
<tr>
<td>28%</td>
<td>On-track</td>
<td>Passed ALG 1 by 9th grade</td>
</tr>
<tr>
<td>8.4%</td>
<td>On-track</td>
<td>Failed to pass GEO</td>
</tr>
<tr>
<td>11.4%</td>
<td>Close</td>
<td>Failed to pass ALG 1</td>
</tr>
<tr>
<td>12%</td>
<td>DROP</td>
<td></td>
</tr>
</tbody>
</table>

- 76% passed Algebra 1 by 10th grade (45.7% school average)
- 57% are on-track with “a-g” requirements (20.1% school average)
- Math CST scores 46.8% better than school average
College Going Initiative
raising college awareness and culture

- **Intersegmental partnership:**
  - UCR (P-20, EAOP, MESA), Crafton Hill, Cal State San Bernardino, school counselors, private colleges

- **~30 scheduled activities throughout the school year**
  - almost all completed by all partners, 1/3 completed by P-20 alone

- **Activities include:**
  - CGI presentations to students grades 9-12 (impacted over 2000 students or 66% of school population)
  - Campus tours for 11th and 12th grade students + families (UCR and UCI)
  - UC Enrollment Drive (personal statement workshops + FASFA night + online enrollment helpdesk)
  - Special trips to UCR for groups of students (biology honors)
    - Organizational support from San G teacher, CMST, ALPHA and UCR faculty

- **What did not work well:**
  - Saturday campus tours throughout the school year (in both cases ~20% of the expected attendance)
San G - 12th Grade Statistics

Source: San G, DataQuest and UCOP
San G - UC Applicants/Admit/Enroll

80.4% admitted

UC Enrollment Drive Effect
All UC Campuses: Applicants and Admitted
School University Partnership  
(since 2008)

- **Perris Unified High School District** (1 MS, 3 HS, 3 CS)
  - 63% Hispanic secondary student population (83% in elementary school)
  - Socioeconomic disadvantaged = 67%
  - Students scoring proficient or above in math CST = 7%
  - UC/CSU graduation rate = 20% (29% county average)
  - Perris HS is a Title I school for the 3rd consecutive year…

- **Activities:**
  - 10 undergrad apprentices per year provide supplementary classroom instruction in math with mentor teachers for 3h/wk (impacting approximately 350 students per year)
  - First Summer Advancement Academy in 2009 (92 students) already planned for 2010 (~70 students)
  - Assessment in progress… (new local dynamics to understand)
SAA Experience
UCR Noyce Scholarship Program

• NSF Scholarship Grant for Math and Science Teachers
  – Award received June 2009

• Partners: UCR Programs (SMI and GSOE) and Moreno Valley Unified School District
  – 61% Hispanics
  – Socioeconomic disadvantaged = 64%

• Activities
  – Math and science undergraduate and grad students (credential year) are placed as teacher-apprentice in secondary school classrooms
  – 5 schools impacted with 11 Noyce scholars
  – 78% of Noyce scholars are from minority populations
  – Assessment in progress on Noyce scholars
Any Questions?