TAKING ACCELERATION TO SCALE:
The California Acceleration Project

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WHAT'S THE PROBLEM?

- The more levels of developmental courses a student must go through, the less likely that student is to ever complete college English or Math.

NATIONWIDE DATA
256,672 FIRST-TIME DEGREE-SEEKING STUDENTS FROM 87 COLLEGES PARTICIPATING IN ACHIEVING THE DREAM

<table>
<thead>
<tr>
<th>Students' Initial Placement in Developmental Sequence</th>
<th>% of Students Who Successfully Completed College-Level Gatekeeper Courses in Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td></td>
</tr>
<tr>
<td>1 Level Below College</td>
<td>42%</td>
</tr>
<tr>
<td>2 Levels Below College</td>
<td>29%</td>
</tr>
<tr>
<td>3 Levels or More Below College</td>
<td>24%</td>
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<tbody>
<tr>
<td>Math</td>
<td></td>
</tr>
<tr>
<td>1 Level Below College</td>
<td>21%</td>
</tr>
<tr>
<td>2 Levels Below College</td>
<td>30%</td>
</tr>
<tr>
<td>3 Levels or More Below College</td>
<td>10%</td>
</tr>
</tbody>
</table>

AND FURTHER LOWLIGHTS FROM ACROSS CALIFORNIA...

- Black students are more likely to be placed in the lowest level of remedial English than other ethnic groups.

- Black students are much less likely to be placed in the highest remedial English course than White students (43% of Black students vs 64% of White students).

- Both Black and Latino students are much more likely to be placed into the lowest level of remedial Math than White or Asian students.

THE CALIFORNIA ACCELERATION PROJECT

Supporting California's 118 Community Colleges To Redefine Developmental English and Math Curricula And Increase Student Completion

An initiative of the California Community Colleges' Success Network (CCSN), with support from the Walter S. Johnson Foundation, LearningWorks, and 'Stealing Innovation', a project of the Community College Research Center funded by the William and Flora Hewlett Foundation

For more information, contact Katie Henn, khenn@chabotcollege.edu
A CHEAT SHEET FOR MOBILIZING CHANGE
FROM THE CALIFORNIA ACCELERATION PROJECT

1. Make a case that is compelling to both the rider and the elephant.
2. Set a clear, unambiguous direction the rider can steer toward.
3. Create a vision of the possible to help faculty see how things can be different and better.
4. Support early initiatives to navigate change, develop curricula, and discuss pedagogy.

WHY HIGH ATTRITION RATES ARE A STRUCTURAL PROBLEM

For students placing two levels below a college course in English/Math, there are 5 "exit points" where they fail away:
- Do they pass the first course?
- If they pass, do they enroll in the next course?
- If they enroll, do they pass the second course?
- If they pass, do they enroll in the college-level course?
- If they enroll, do they pass the college-level course?
Students placing three levels down have 7 exit points.

WHY HIGH ATTRITION RATES ARE A STRUCTURAL PROBLEM

Chabot College pipeline data for students beginning two levels down:
- Do they pass the first course? 65%
- If they pass, do they pass the second course? 76%
- If they enroll, do they pass the course? 79%
- If they pass the first course, do they pass the college-level course? 86%
- If they enroll, do they pass the college-level course? 83%

HOW WOULD INCREASING FIRST-COURSE SUCCESS IMPACT OVERALL COMPLETION RATE?

(0.65)(0.76)(0.86)(1.00)= 43%

Try it out...
What if we got the first course to 65% success?
76% success?
86% success?
(Keep the other numbers the same)

THE INEVITABILITY OF ATTRITION IN SEQUENCES

Table 1: Illustration of the multiplication principle

<table>
<thead>
<tr>
<th>Work</th>
<th>Addition</th>
<th>For example, in which year might the year’s instruction be the same or similar to the one in the sequence?</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>2010</td>
<td>2010</td>
</tr>
<tr>
<td>2011</td>
<td>2011</td>
<td>2011</td>
</tr>
<tr>
<td>2012</td>
<td>2012</td>
<td>2012</td>
</tr>
</tbody>
</table>

EVIDENCE ACCELERATION WORKS:
When chess-accelerated students enter college English, they pass at the same rate as students from lower track (and twice as many actually GET there).

ONE NEW MODEL OF ACCELERATED DEVELOPMENTAL MATH
Path2Stats, Los Medanos College
A 6-unit developmental Math course with no prerequisite:
- Intended for non-STEM students
- Bypasses the standard 4-course sequence leading to Calculus
- Developed through "backwards design" from college Statistics:
  - Includes only those elements of algebra and arithmetic relevant to statistics
  - "Just-in-time remediation" of relevant algebra and arithmetic as students engage in statistical analysis
- Successful students eligible to take college Statistics
- Offered since 2009

PATH2STATS, LOS MEDANOS COLLEGE
Rationale:
- Student Pathways: 75-80% of Los Medanos College students who complete the developmental math sequence and take a college-level math course take Statistics. They are not STEM students
- Misalignment of Developmental Math with Statistics: Very little algebra is needed to be successful in Statistics

RATIONAL FOR Path2Stats
- Misalignment of Developmental Math with Statistics

(EMERGING) EVIDENCE ACCELERATION WORKS: Proof of Concept
Summary of first two cohorts (2013, 2014):

<table>
<thead>
<tr>
<th>Success in accelerated pre-Stat course</th>
<th>Path2Stats % of students successfully completing Stat</th>
<th>% of students who successfully complete college-level math courses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Algebra or Arithmetic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary Algebra</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate Algebra</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Calculus</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Success in accelerated pre-Stat course: 85% (71 of 84)
Path2Stats % of students successfully completing Stat: 93% (68 of 71)
Overall college course completion rate: 91% (64 of 71)
CLASSROOM VIDEOS
- Video footage from Katie Hern's open-access accelerated English class, Fall 2009
- Students are working collaboratively to understand an excerpt from Paulo Freire's Pedagogy of the Oppressed
- It is the fourth class session. The discussion builds on earlier readings about education by Malcolm X, Krishnamurti, and Mike Reza, along with a study by Anyon documenting serious differences between schools in different socio-economic communities.

http://www.youtube.com/16999449
Produced as part of Faculty Inquiry Network

BUILDING VISIONS OF THE POSSIBLE
Sample class materials
- A packet of required texts, quizzes, and assignments from Katie Hern's accelerated course
- Handouts dealing with key pedagogical issues - e.g. teaching practices for coping with low expectations for critical thinking, guidelines on choosing tests for an accelerated English course
- Online summary of curriculum available to pilot college through the Open Learning Initiative

Materials available online:
http://khan.org/developmental-sequences

More web-based resources to be developed in 2011-12

A CHEAT SHEET FOR MOBILIZING CHANGE
Lessons from the California Acceleration Project

Part Four:
Support Early Initiators to Navigate Change, Develop Curricula & Discuss Pedagogy

CHANGE CAN BE SCARY BUT ALSO INCREDIBLY MOTIVATING
- Video interview with a member of the 2011 Community of Practice, Shawn Pedorak, a part-time English instructor at Yuba College
- How it feels to be getting ready to teach her first accelerated course...

http://www.youtube.com/watch?v=TSaJnDmrGk &feature=unrelated&list=UL

SUPPORT EARLY INITIATORS
Three kinds of support are key
- Moments to "rally the herd" (a Sack concept)
  Spaces where early initiators can connect - coverages & regular team meetings to share ideas, role play for stressed department meetings, share lesson plans, discuss logistics, and become familiar to mobilize for change
- Coaching
  More experienced teachers mentor teachers newer to accelerated models on navigating curricular approval, making the case for change, developing curriculum, and addressing classroom concerns
- Web Resources
  Materials people can use to implement acceleration in their local contexts: http://khan.org/developmental-sequences

WANT TO JOIN THE MOVEMENT?
1. Examine your local pipeline data: How many students from different starting placements go on to pass the transfer-level course in English/Math?
2. Coming Soon: Easy cohort tracking tool from RP Group <
3. Build a core group of idea champions with a sense of urgency about getting more developmental students to complete transfer-level English/Math courses
4. Get an experimental course in place for 2012-13
5. Join the next cycle of the Community of Practice
6. Reach out to Katie Hern and Myra Beshar for phone consultations & resource support

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