**What’s the Problem?**

- The more levels of developmental courses a student must go through, the more likely that student is to never complete college English or Math.

**Nationwide Data**

<table>
<thead>
<tr>
<th>Students’ initial placement in developmental sequence</th>
<th>% of students who successfully complete college-level gatekeeper course in subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td></td>
</tr>
<tr>
<td>1 Level Below College</td>
<td>40%</td>
</tr>
<tr>
<td>2 Levels Below College</td>
<td>20%</td>
</tr>
<tr>
<td>3 Levels or More Below College</td>
<td>10%</td>
</tr>
</tbody>
</table>


**Nationwide Data**

<table>
<thead>
<tr>
<th>Students’ initial placement in developmental sequence</th>
<th>% of students who successfully complete college-level gatekeeper course in subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td></td>
</tr>
<tr>
<td>1 Level Below College</td>
<td>27%</td>
</tr>
<tr>
<td>2 Levels Below College</td>
<td>20%</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 (40% 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 112 Community Colleges To Redesign Developmental English and Math Curricula And Increase Student Completion

An initiative of the Community College Oceano Network (CCON), with support from the Walter S. Johnson Foundation, LearningWorks, and “Stepping In,” a project of the Community College Research Center funded by the William and Flora Hewlett Foundation.

http://ccconline.org/developmental-sequences

For more information, contact Katie Hear, khear@csuchico.edu
CALIFORNIA ACCELERATION PROJECT HIGHLIGHTS FROM 2010-11

- More than 50 California community colleges participated in the project's broad outreach (8 regional workshops, 2 summer institutes, webinar, multiple conference presentations, phone/email consultations)

- Faculty from 17 early-initiator colleges are part of the 2011 Community of Practice
  Three in-person curriculum and pedagogy workshops
  Ongoing coaching from Katie Horn & Myra Shell
  Approximately 100 accelerated English and pre-Statistics sections offered at these colleges in 2011-12

- An additional 14 faculty teams participated in SCSN's Basic Skills Leadership Institute 2011
  Focused on implementing accelerated courses by 2013-14

AN EARLY INITIATOR

Jenny Freidmanrich
Math Instructor, Diablo Valley College
Developing an accelerated pre-Statistics course as part of the Community of Practice in Acceleration
http://www.youtube.com/watch?v=1bQ1271fFg8&feature=c4-overview

Taking acceleration to scale requires us to think about what motivates people to change.

The authors of Switch argue that we must remember that each of us has two competing drives influencing the decisions we make...

THE RIDER

"Our rational side... the part of you that deliberates and analyzes..."

Strengths: Planning, long-term thinking

Weaknesses: Over-thinking, wheel-spinning, nit-picking the data, tendency toward overwhelm and exhaustion

(Switch, pp. 6-8)

THE ELEPHANT

"The emotional side... the part of you that feels pain and pleasure... compassion and sympathy and loyalty..."

Strengths: Passion, energy, drive, getting things done

Weaknesses: Not necessarily rational

Strengths/Weakness: Will not budge if it doesn't want to...

(Switch, pp. 6-7)

WHO'S STEERING?

"Anytime the six-ton Elephant and the Rider disagree about which direction to go, the Rider is going to lose."

(Switch, p. 7)

To mobilize change, we must speak to rider and elephant.
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 initiators 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 6 "exit points" where they fall 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 from college composition:
  • Do they pass the first course? 65%
  • If they pass, do they enroll in the next course? 76%
  • If they enroll, do they pass the second course? 73%
  • If they pass, do they enroll in the college-level course? 56%
  • If they enroll, do they pass the college-level course? 83%

(0.65)(0.76)(0.79)(0.86)(0.83) = 23%

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

(0.55)(0.76)(0.79)(0.86)(0.83) = 23%

Try it out...

What if we got the first course to 65% success? 76% success? 83% success?

(Keep the other numbers the same)

THE INEVITABILITY OF ATTRITION IN SEQUENCES

Table 1: Illustration of the multiplication principle

<table>
<thead>
<tr>
<th>Level below baseline</th>
<th>50%</th>
<th>40%</th>
<th>60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 level below median</td>
<td>35%</td>
<td>21%</td>
<td>42%</td>
</tr>
<tr>
<td>2 levels below</td>
<td>11%</td>
<td>7%</td>
<td>21%</td>
</tr>
<tr>
<td>3 levels below</td>
<td>6%</td>
<td>2%</td>
<td>18%</td>
</tr>
</tbody>
</table>

BOTTOM LINE

We will never significantly increase completion rates of college English and Math unless we reduce the length of our developmental sequences and eliminate the many exit points where students fall away.

UNAMBIGUOUS DESTINATION

Accelerated Developmental Education:
Curricular restructuring that reduces sequence length and eliminates exit points. Ideally includes a reconsideration of curricular content:
Is what we are teaching what students truly need to succeed in college English or Math?

Key Student Outcome to Track:
What percentage of students from different starting placements go on to complete transferable English/Math?

ONE WELL-ESTABLISHED MODEL OF ACCELERATED READING & WRITING

Chabot College
English 102:
Reading, Reasoning, and Writing (Accelerated)
A one-semester 4-unit developmental English course leading directly to English IA
- An alternative to two-semester, 8-unit sequence
- No minimum placement score, students self-place in either the accelerated or two-semester path
- Developed with “backward design” from college English
- Students engage in the same kinds of reading, thinking, and writing of college English, with more scaffolding and support
- College has expanded accelerated offerings in last decade: course now constitutes more than 15% of entry-level sections

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

Part Two:
Set a Clear, Unambiguous Destination
The Rider Can Steer Toward

But flexible models to adapt locally
- Mainstreaming Students into College-Level Courses
- Open-Access Integrated Reading and Writing Courses
- Open-Access Pre-Statistics Courses
- Contextualized Instruction in Career-Technical Programs
- Mechanisms for Bypassing Remedial Levels
- Compression Models that Combine Existing Course Levels

EVIDENCE ACCELERATION WORKS:
SIGNIFICANT INCREASE IN STUDENTS PERSISTING TO AND SUCCESSING IN COLLEGE ENGLISH

| Students Taking Developmental English in Fall 14, 15, 16, or 17 |
|-----------------------|-----------------------|
| Pre-Test Score        | Post-Test Score       |
| 0-100                 | 101-120               |
| 101-120               | 121-140               |
| 121-140               | 141-160               |
| 141-160               | 160+                  |

Overall: Success in English 102
**Evidence Acceleration Works:**

When charter accelerated students get to college English, they pass at the same rate as students from longer tracks (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**
  - 70-90% 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.

---

**Rationale for Path2Stats**

- Misalignment of Developmental Math with Statistics

---

**Emerging Evidence Acceleration Works: Proof of Concept**

<table>
<thead>
<tr>
<th>Summary of 1st two cohorts (2010, 2011)</th>
<th>Path2Stats % of students successfully completing Statistics</th>
<th>% of students who successfully complete college-level math courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success in accelerated pre-Stat course</td>
<td>85% (71 of 84)</td>
<td></td>
</tr>
<tr>
<td>Fluency in Statistics</td>
<td>93% (68 of 71)</td>
<td></td>
</tr>
<tr>
<td>Success in Statistics</td>
<td>82% (64 of 66)</td>
<td></td>
</tr>
<tr>
<td>Overall college course completion rate</td>
<td>64% (64 of 84)</td>
<td></td>
</tr>
</tbody>
</table>

---

**Emerging Evidence Acceleration Works: Proof of Concept**

- Transfer-level: 100% (3 of 3)
- Intermediate Algebra: 95% (18 of 19)
- Elementary Algebra: 85% (21 of 24)
- Pre-algebra Arithmetic: 81% (11 of 13)
UNAMBIGUOUS DESTINATION
Eligibility for the California Acceleration Project’s 2011 Community of Practice required:
- Offering at least 2 accelerated sections in 2011–12
- Reducing the length of developmental sequence
- Eliminating exit points where students are lost
- Using "backwards design" to develop accelerated curricula –
  engaging students in the same content, skills, and habits of
  mind required to the college-level course
- Using "just-in-time remediation" instead of "frontloading" discrete sub-skills
- In Math, offering a pre-statistics alternative to the traditional
  Algebra sequence for students on non-STEM paths

FLEXIBLE PATHS: ENGLISH
- Fullerton College
  "Stretch and Skip" with prerequisite waiver
  The course two levels below college English is being taught to
  the outcomes of the course one level below, with a pre-
  requisite waiver mechanism enabling students with sufficient
  mastery to skip directly to college English.
- Pyramids City College
  "Managing Learning" into one level below
  Students placing two levels below the existing sequence are
  able to enroll in the course one level below 10 of the 20 seats
  in plus sections reserved for this group.

FLEXIBLE PATHS: ENGLISH
- Yuha College:
  Integrated reading and writing
  Students placed two levels below college English can enroll in
  one integrated course, rather than two separate reading and
  writing courses. The pre-requisite waiver process will enable
  high performing students to skip directly to college English.
  
  Intensive integrated reading and writing
  Students placing into any one of the four separate
  developmental reading/writing courses can enroll in one 0-unit
  integrated course.

Math holding you back??
The Cayamaca State Academy
Free two classes and you're done with math for
your 4-year degree at Cayamaca College and many
4-year degrees at most universities
Math 96 Preparation for Elementary Statistics & Math 106 Elementary Statistics

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

Part Three:
Create a vision of the possible to
help faculty see
how things can be
different and better

CREATE A VISION OF THE POSSIBLE
Sometimes teachers' elephants don't move
because they literally
can't see the way ahead.
It helps to provide vivid
and concrete images of
what the new approach
might look like...
CLASSROOM VIDEOS
- Video footage from Katie Hern’s open-access accelerated English class, Fall 2009
- Students are working collaboratively to understand an excerpt from Paolo 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 Rieh, along with a study by Arjun documenting serious differences between schools in different socio-economic communities.
http://www.vimeo.com/108092163
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 keeping effective classes for working students, guidelines on choosing texts for an accelerated English course
- Uniting statistics curriculum available at print colleges through the Open Learning Initiative
Materials available online:
http://cdn.org/developmental-sequences
More web-based resources to be developed in 2011-12

A CHEAT SHEET FOR MCVILIZING 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 Frederick, 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=TS0fnDnMzGI&feature=mfu_in_order&list=UL

SUPPORT EARLY INITIATORS
Three kinds of support are key
- Moments to “rally the herd” (a Switch concept)
  - Spacing where early initiatives are connect – convenings & regular team meetings to share ideas, role-play for hesitant instructors, record stories, plan, rehearse logistical, and become familiar to mobile leaders
- Coaching
  - More experienced teachers mentor teachers newer to accelerated models on navigating curriculum 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://cdn.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. Build a core group of idea champions with a sense of urgency about getting more developmental students to complete transfer-level English/Math courses
3. Get an experimental course in place for 2012-13
4. Join the next cycle of the Community of Practice
5. Reach out to Katie Hern and Myra Snell for phone consultations & resource support
  - khsra@laboltcollege.edu
  - myra@s8one.net