Math Multimedia Learning Center (MMLC) Redesign
A mastery-based pathway to success
What is the MMLC?

- Individualized Math learning
- Arithmetic to Intermediate Algebra
- Attend class once a week
- Students receive individual attention from instructor
- Center is open Mon – Sat.
- Tutoring available, including 1-1 tutoring
Aspects of 2013 Redesign

- Mastery based class
  - Homework/quizzes 90% to pass
  - Exams 80% to pass
- Attendance mandatory
- Students meet with instructor each week

Continued feature

- Acceleration
  - Students can complete more than one class per semester
Success with Under-Represented Groups: African American Students

* Pipeline data
Success with Under-Represented Groups: Hispanic/Latino Students

Success Rate from Elementary to Intermediate Algebra

* Pipeline data
Overall Success

Success Rate from Elementary to Intermediate Algebra

* Pipeline data
Successful Key Agents

- Mastery
  - Students must master subject matter before moving on
  - Reduced gaps in learning

- Personalized student interaction
  - Instructors meet with every student each class period
  - Time to connect with students
  - Students feel supported
Program Expansion

MMLC at Natomas Center
- Increases Participation by ~18% percent

Considerations for Further Scaling
- Resources
  - Facilities, Equipment, Staffing, FTE, etc.
- Diverse learning styles & needs
  - Some students prefer a traditional class environment
  - Some students are not tech savvy
- Culture change
Statway™ Success with Under-Represented Groups: African American Students

- Statway (Fall 2012 Cohort, 1 yr): 56%
- Math 100 - Stat 300 (Fall 2012 Cohort, 2 years): 14%
Statway™ Success with Under-Represented Groups: Hispanic/Latino Students

- **70%** Statway (Fall 2012 Cohort, 1 yr)
- **13%** Math 100 - Stat 300 (Fall 2012 Cohort, 2 years)
Statway™ Success
Overall

- Statway (Fall 2012 Cohort, 1 yr): 72%
- Math 100 - Stat 300 (Fall 2012 Cohort, 2 years): 21%
Statway™ Success
*Nationwide

Success Rate (C or better)

<table>
<thead>
<tr>
<th>Year</th>
<th>Statway *National</th>
<th>Comparison Group</th>
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<tbody>
<tr>
<td>2011-2012</td>
<td>48.0%</td>
<td>16.0%</td>
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<tr>
<td>2012-2013</td>
<td>52.0%</td>
<td>14.0%</td>
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Statway™ Success
Comparative Data

- 2011-2012:
  - Statway Group: 85%
  - Comparison Group: 11%

- 2012-2013:
  - Statway Group: 71%
  - Comparison Group: 10%

(Carnegie Foundation for the Advancement of Teaching)
Statway™ Success
The Story Doesn’t End There...

Credits Accumulated in Following Academic Year
American River College

<table>
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<tr>
<th>Accumulated Credits</th>
<th>Pathway Group</th>
<th>Comparison Group</th>
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<td>9.61</td>
<td>4.98</td>
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Carnegie Foundation
for the Advancement of Teaching
Keys to Statway™ Success

• Curriculum
  – Productive Struggle
  – Explicit Connections
  – Deliberate Practice

• Productive Persistence

• Faculty Training
Keys to Statway™ Success
ARC

- Orientation Meetings
- 2 Semester Cohorts
- Beacon Tutors
- Support from Counselors
- Campus Support
Considerations for Scaling Statway™

• Articulation
  – CSU through Spring 2016
  – UC
    • Submitting for IGETC this fall
  – Transfer Degrees
    • C-ID

• Bridge Course
Considerations for Scaling Statway™

Resources:

- Coordination
- Faculty to teach
- Instructional Aid(s)
- Student tutors
- More space
Student Voices