Maricopa Pathways Workshop 4: Integrating Redesigned Developmental Education into Maricopa’s Pathways

Kay McClennen: AACC and NCII
Gretchen Schmidt: AACC and NCII
Developmental Education & Pathways
CORE PRINCIPLE #1:
An intake process to promote academic direction

• Accelerated refresher before high-stakes assessment test \((if\ used)\)

• Multiple measures for assessment: include high school GPA, self-assessment, and other measures along with placement test \((if\ used)\)

• Mandatory orientation, including career exploration, guided pathways intro, mindset principles, productive persistence concepts, and the approach to ongoing advising
CORE PRINCIPLE #1: An intake process to promote academic direction

• Intrusive advising, promoting choice of a field of interest and then a program/major—or linking students to immediate career and academic exploration

• Education plan – development of a full program plan during the first term/year, providing a way to monitor progress over time
CORE PRINCIPLE #2:
Enrollment in college-level math and English or course sequences aligned with student’s program of study

- Enrollment in a default schedule for a defined program pathway
- Identification of “the right math” appropriate to respective pathways
- Direct enrollment in college-level English & math courses with co-requisite support, *in the first year.*
CORE PRINCIPLE #2:
Enrollment in college-level math and English or course sequences aligned with student’s program of study

- Student success course in first term: create a sense of belonging; expand on career exploration, productive persistence, growth mindset; contextualize to fields of interest
- Redesigned gateway/critical courses by pathway
- Professional development for faculty (support course redesign and academic support)
CORE PRINCIPLE #3: Academic and non-academic support in conjunction with gateway courses

• Multiple high-impact practices in introductory college-level courses
• Co-requisite support/acceleration

Embedded support:
• Supplemental instruction
• Mandatory learning labs
• Mandatory tutoring
• Mandatory study groups
CORE PRINCIPLE #3:
Academic and non-academic support in conjunction with gateway courses

• Learning communities
• Growth mindset principles
• Time management
• Financial literacy
• Housing/food support (collaboration with community agencies)
• Transportation support
CORE PRINCIPLE #4:
Streamlined remediation models (when default placement in college-level courses is not appropriate)

- Intensive summer programs
- Integration of developmental reading and writing
- Fast track/flex/accelerated/emporium models
- Contextualization of academic skill development within field of interest/program (e.g., iBEST)
CORE PRINCIPLE #4:
Streamlined remediation models (when default placement in college-level courses is not appropriate)

- Block scheduling
- Early alert process
- Professional development to promote a design for learning and to promote a culture of acceleration
CORE PRINCIPLE #5: Content of required gateway courses aligned with chosen program

• Appropriate and sustained academic and non-academic supports integrated into courses
• Math pathway matched with chosen guided pathway
• Redesigned gateway courses with clear learning outcomes and guided pathway program content
• Collaboration with K-12, university, and business/industry partners to align curriculum
CORE PRINCIPLE #6:
Track students and act on performance and progression data

- Professional development: capacity to use data
- Robust early alert process
- Success coaches/case management in pathways
- Progress monitored against students’ education plans
- Recognition of students’ milestone attainment
- Course success data used by discipline
- Refinement of education plans as student goals are clarified
- Target set for students to complete college-level math, English, and courses in chosen guided pathway in their first academic year
Evidence from Early Adopters

Tennessee Community Colleges
Building Guided Pathways to Community College Student Success
Promising Practices and Early Evidence From Tennessee

Davis Jenkins | Amy E. Brown | John Fink | Hana Lahr | Takeshi Yanagiura
Tennessee “Completion Practices”

a) Map all programs to job and transfer outcomes (including the “right” math)

b) Redesign intake experience to help students explore, choose a major or focus area, develop full-program plan

c) Require students with ACT of 13-18 to take “corequisite” math (aligned with math pathway), writing and/or reading

d) Require students with ACT below 13 to develop learning plan and give them intensive support

e) Increase exposure of all students to high-impact teaching practices
Program-Aligned Math Pathways

Gateway Math Courses Taken by First-Time-Ever-in-College Students In Tennessee Community Colleges, Fall 2016

Join a Community!

Advanced Technologies
Explore programs related to hands-on technical training.

Business
Explore programs and careers related to the world of finance.

Education
Explore careers and programs related to education.

Healthcare
Explore programs and careers related to the health sciences.

Arts & Humanities
Explore programs and careers related to human culture and artistic expression.

Social Sciences
Explore programs and careers related to the human society and social relationships.

S.T.E.M.
Explore programs and careers in science, technology, engineering, and math.
Rethinking Student Advising along a Path

Rethinking Student Advising

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information dump at orientation</td>
<td>Support for major decisions along students’ paths</td>
</tr>
<tr>
<td>Class scheduling based on what suits the college’s schedule</td>
<td>Class scheduling planned to fit students’ plans and schedules</td>
</tr>
<tr>
<td>Student progress gauged based on full-time vs. part-time status</td>
<td>Student progress conceived of as on-plan vs. off-plan</td>
</tr>
<tr>
<td>Advising and teaching thought of as two separate endeavors</td>
<td>A student-support environment where advisors teach and teachers advise</td>
</tr>
<tr>
<td>Course registration as a task where students self-advice</td>
<td>Course registration monitored by advisors to ensure students register for the right courses on their plan</td>
</tr>
</tbody>
</table>
TN CCs: Gateway Course Completion KPIs

- Completed college English in first year
- Completed college math in first year
- Completed both college math and college English in first year

Source: CCRC Analysis of TBR Data
TN CCs: Passed college English in year 1, by Race

Source: CCRC Analysis of TBR Data
TN CCs: Passed college math in year 1, by Race

Source: CCRC Analysis of TBR Data
<table>
<thead>
<tr>
<th>Subject</th>
<th>Percent Change 2010-2016</th>
<th>Percentage Point Change 2010-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>149%</td>
<td>27pp</td>
</tr>
<tr>
<td>English</td>
<td>47%</td>
<td>20pp</td>
</tr>
<tr>
<td>Math &amp; English</td>
<td>165%</td>
<td>25pp</td>
</tr>
</tbody>
</table>

Note: These figures show the percent change and percentage point change in the completion of college-level math, English, and both between 2010 and 2016.
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Math</td>
<td>17pp</td>
<td>2pp</td>
</tr>
<tr>
<td>English</td>
<td>11pp</td>
<td>2pp</td>
</tr>
<tr>
<td>Math &amp; English</td>
<td>15pp</td>
<td>2pp</td>
</tr>
</tbody>
</table>
TN CCs: First Term Credit Momentum KPIs

- Earned 6+ college credits in first term
- Earned 12+ college credits in first term
- Attempted 15+ credits (any level) in first term

Source: CCRC Analysis of TBR Data
TN CCs: First Year Credit Momentum KPIs

- Earned 15+ college credits in first year
- Earned 30+ college credits in first year
- Earned 24+ college credits in first year
- Attempted 30+ credits (any level) in first year

Source: CCRC Analysis of TBR Data
TN CCs: Earned 12+ credits in 1st term, by Race

Source: CCRC Analysis of TBR Data
TN CCs: Earned 24+ credits in 1st year, by Race

Source: CCRC Analysis of TBR Data
<table>
<thead>
<tr>
<th>Category</th>
<th>Percent Change 2010-2016</th>
<th>Percentage Point Change 2010-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earned 12+ Credits, 1&lt;sup&gt;st&lt;/sup&gt; term</td>
<td>136%</td>
<td>17pp</td>
</tr>
<tr>
<td>Earned 24+ credits, 1&lt;sup&gt;st&lt;/sup&gt; year</td>
<td>101%</td>
<td>12pp</td>
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<tr>
<td>Earned 30+ credits, 1&lt;sup&gt;st&lt;/sup&gt; year</td>
<td>72%</td>
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<td>Earned 12+ Credits, 1st term</td>
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<td>11pp</td>
</tr>
<tr>
<td>Earned 24+ credits, 1st year</td>
<td>19pp</td>
<td>8pp</td>
</tr>
<tr>
<td>Earned 30+ credits, 1st year</td>
<td>6pp</td>
<td>2pp</td>
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Alamo Colleges Gateway Math & English Momentum KPIs

- Completed college English in year 1: 62%
- Completed college Math in year 1: 34%
- Completed both college Math and English in year 1: 29%

Alamo Colleges 3-year Completion Rates by KPI

- Met KPI:
  - Completed college English in year 1: 22%
  - Completed college Math in year 1: 29%
  - Completed both college Math and English in year 1: 32%
- Did not meet KPI:
  - Completed college English in year 1: 6%
  - Completed college Math in year 1: 8%
  - Completed both college Math and English in year 1: 8%

Note. Trends in Alamo Colleges Gateway Math and English Momentum KPIs are shown in the left panel. The right panel shows completion rates for fall 2014 FTEIC entrants at Alamo Colleges who completed any college credential (from any institution) within three years, disaggregated by whether or not students met the particular KPI definition in their first year.
Note. Trends in Cuyahoga Community College Gateway Math and English Momentum KPIs are shown in the left panel. The right panel shows completion rates for fall 2014 FTEIC entrants at Cuyahoga who completed any college credential (from any institution) within three years, disaggregated by whether or not students met the particular KPI definition in their first year. Cuyahoga’s three-year completion rate for the fall 2014 FTEIC cohort overall was 10.5%.
Carnegie Math Pathways

- 18 states
- 100+ colleges
- 30,000 students
Tripling the Success in Half the Time (2011-2017)

**Statway**
1 year stretch pathway replaces 3-4 courses (2-3 dev + 1 college)
- Baseline Success - 2 Years: 15%
- Statway Success - 1 Year: 54%

**Quantway**
1 semester course replaces 2-3 courses
- Baseline Success - 1 Year: 21%
- Quantway Success - 1 Term: 63%
Advancing Equity: Improving Outcomes For All Subgroups

<table>
<thead>
<tr>
<th></th>
<th>Statway - Academic Year</th>
<th>Matched comparison - 2 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Female</td>
<td>19%</td>
<td>0%</td>
</tr>
<tr>
<td>Black Female</td>
<td>11%</td>
<td>20%</td>
</tr>
<tr>
<td>Hispanic Female</td>
<td>15%</td>
<td>40%</td>
</tr>
<tr>
<td>White Male</td>
<td>21%</td>
<td>41%</td>
</tr>
<tr>
<td>Black Male</td>
<td>10%</td>
<td>54%</td>
</tr>
<tr>
<td>Hispanic Male</td>
<td>14%</td>
<td>39%</td>
</tr>
</tbody>
</table>
Consistent Results as Statway Scales

If you could build the ideal structure to provide holistic academic and student supports for students:

- What would it look like in practice for students?
- Who would get the services and how would you know what was needed?
- What structures and policies would have to be put in place for it to be successful?
- Who would be responsible for providing the services? Monitoring their impact?