AB 705 Recommendations Call Attention to Throughput

The MMAP Team

When it first began in 2014, The Multiple Measures Assessment Project (MMAP) sought to identify students who were highly likely to succeed in their first English, math, reading or ESL course taken at the institution and help colleges place those students more effectively into the highest class level in which they were highly likely to succeed. Early on, MMAP found that high school performance is a more accurate predictor of college course success than placement tests, and as of spring 2018, over 90 community colleges statewide were using high school performance data as a multiple measure to place students.

AB 705 (Irwin) now requires colleges to use high school performance data as the primary means of validating placement decisions, and the law allows colleges to place students into basic skills courses only if they are highly unlikely to succeed when directly placed into transfer-level.

“It’s a true paradigm shift,” says Craig Hayward, MMAP research team member. “It takes some time for people to wrap their heads around the change. We are not just looking for placements that yield high pass rates. The placement needs to give students the highest throughput rate, or sequence completion rate, including the gateway transfer-level course.”

This shift is leading colleges to re-envision their placement process, curricular design, concurrent supports and non-curricular support to maximize students’ likelihood of successful completion (C or better) of the transfer-level course within one year (i.e. throughput).
"Colleges should work with their high school and university partners to align course outcomes and practices so that students can continue their progression in English and math when they transition between segments instead of repeat already completed coursework," states Terrence Willett, MMAP research team member. “Under AB 705, colleges must now examine the impact of time and the number of exit points in a sequence.”

The goal of MMAP was to identify students that were highly likely to succeed at any given level of an English and Math course. The research found that a higher rate of students were likely to succeed in transfer-level courses when placed by MMAP than by traditional placement systems, and large numbers of students were being substantially underplaced statewide by traditional placement systems, with underrepresented minority and female students placed disproportionately lower than their non-minority and male peers, especially in math.

AB 705 requires colleges to maximize the probability that students will complete transfer-level coursework in math and English within one year of their initial attempt. It also requires colleges to use high school performance data to conduct research to determine if they are maximizing throughput. MMAP research compared the throughput for groups of students with similar high school performance profiles (deriving those groups from the MMAP decision trees) who are placed directly in transfer-level versus those placed one-level below. This comparison allowed MMAP researchers to determine which placement maximizes throughput for specific groups of students with similar high school performance levels.

Multiple Measures Assessment Project (MMAP) Summary of Methodology for English and Math Phase II Rule Sets and AB 705 Adjustments (Click on the image to see full infographic.)

To provide colleges with a statewide baseline of what it looks like to maximize throughput under AB 705, the MMAP team used existing research from the original MMAP decision trees to compare the successful completion (C or better) of students placed directly in transfer-level courses to the one-year throughput rates of students with similar GPAs who started at one level below transfer. Decision trees are created with a machine-learning algorithm that splits data to create groups or “nodes” of students — in this case, those with similar success rates based on high school achievement variables such as course grades, course level, cumulative grade point average (GPA), and delay between high school and college. The decision trees resulted in models used to predict students' success in their first English or math course at a CCC using high school performance information.

To find baseline throughput rates, the MMAP team first focused on those students who had the lowest likelihood of success and ultimately, the lowest high school GPA. These “lowest node” students had relatively low likelihoods of passing the course when placed directly into transfer-level and therefore were presumably most likely to benefit from placement into a basic skills course. Eventually, the research was expanded to include students in higher performing nodes, as well.

The research findings showed for all three courses examined — transfer-level English, statistics, and pre-calculus — students who started directly at
transfer-level completed the transfer-level course at a rate of about three times greater than students who started below transfer-level for all levels of high school GPA, including students with the lowest high school GPAs. This finding held true when disaggregated by gender and ethnicity and students in Extended Opportunity Program and Services (EOPS) and students part of the Disabled Students Program and Services (DSPS).

We recommend that colleges conduct their own analyses to compare below-transfer-level basic skills throughput rates to direct transfer-level placement success rates both with and without specialized support such as co-requisites to ensure that local data runs parallel to the statewide findings and determine what supports are most beneficial to students.

"Implementation matters" says Willett. "Even a good idea can be implemented poorly so evaluation is critical to successfully applying new models." Students with lower high school GPAs will need additional supports in the transfer-level courses to increase their throughput rates to that of students with higher high school GPAs.

“It’s a somewhat counterintuitive situation in which we may see lower overall pass rates in transfer-level classes, at least for a time, until we have a chance to adapt our curriculum and developmental approaches, and yet the overall throughput of students will be sharply increasing. It’s basically a matter of course-level success versus throughput rate,” says Hayward. “This shift in focus to sequence completion is visible in many current metrics tools. This is where the action is going to be in the next few years.”

The MMAP research team has compiled resources to assist colleges with the research and evaluation associated with AB 705 implementation and is available to assist colleges in running these analyses if needed. There will also be a range of webinars this fall to help guide colleges through the transition.

Data-driven Focus on Equity at Pasadena City College Eases Transition into AB 705

Crystal Kollross, Executive Director, Institutional Effectiveness Department; Cynthia Olivo, Vice President of Student Services, Pasadena City College

In 2015, Pasadena City College (PCC) was facing an uncertain future. The college had built an identity as a leader in transferring students to four-year universities, but success data had plateaued. Growing populations of students were not able to meet the colleges’ rigorous expectations for performance, and minority students were especially underserved.

“We’ve always been known as a transfer leader,” said Cynthia Olivo, vice president of student services at PCC, which consistently ranks among the top five colleges in the state for transfers. “Our honors program, our study abroad, our beautiful campus — these all helped the students who wanted to go on to get a traditional college degree. But we were leaving so many others behind, and we didn’t even mean to.”

Following reflection on research by Dr. Estela Bensimon and the Center for Urban Education (CUE) at the University of Southern California, that fall Olivo and her colleagues came together under a common motivation: PCC was going to put student equity front and center in its decision making. She joined forces with
Crystal Kollross, executive director of the college’s institutional effectiveness department, to build a data infrastructure that would make their case.

Kollross brought together data the college collected on its students – including race, ethnicity, and other demographics, but also academic performance and momentum and completion information — to begin painting a complete picture of the student body.

“The trendlines were impossible to ignore,” Kollross said. “Students who were ready to transfer were finding a place, but wide swaths of our students were being left behind.”

PCC’s focus on outcomes and not equity had led to success and completion rates of African American and Latino students that lagged behind their white and Asian American counterparts — and the gap was growing. At the same time, 80 percent of the college’s student population were racial minorities, while its employee ranks were overwhelmingly white.

**Laying the Groundwork: A Shift to a Student-Centered Culture**

Over the 2015-16 academic year, the college brought CUE to campus to host eight in-depth workshops for faculty and staff to illuminate and define the ways the college was failing to serve its minority students. USC researchers helped instill a common understanding of how the college should approach equity inside and outside the classroom.

Olivo then continued the efforts in the following year, creating an entire professional development curriculum based on data analysis and service changes to enhance equity. She and Kollross worked to build a faculty dashboard of equity data, making it possible for every member of the faculty to see his or her individual contributions to closing the achievement gap.

Professional development events were offered along five tracks of practice: Equity in the Classroom, Equity in Leadership, Equity in Campus Culture, Equity in Infrastructure, and Equity in Hiring. For every member of the faculty and staff that attended at least three workshops in 2016-17, Olvio donated a laptop to a campus loan program, resulting in 100 laptop computers coming available for students who needed them.

“We really developed a common language regarding equity,” Olivo said. “People were ready to see the story the data was telling us.”

Kollross’ data on employee demographics drove a renewed focus on equity in hiring, to more closely align with the composition of its students. Enhanced tracking of student progress in administrative procedures, streamlined processes, increased levels of coaching by counselors, and cultural competence training of staff, were just some of the steps taken.

Then, the passage of Assembly Bill (AB) 705 in 2017 gave departments a perfect test case to institutionalize the changes it had been contemplating for the last two years.

**Today and the Future: AB 705, Equity Resources, and a Look to Guided Pathways**

After the bill became law, deans led whole-faculty retreats based on data points that covered familiar ground — completion rates by disaggregated ethnicity and key momentum points that indicated likelihood of completion. The willingness to see through an equity lens was striking. When the math division reached consensus on sweeping changes to its course sequence, professor Linda
Hintzman, who had helped build the division’s robust prerequisites, saw the equity perspective. “Thousands of students are finally going to be properly placed because of these changes,” she said.

As PCC’s fall semester nears, the college’s transition to AB 705 is nearly complete. Only one math course below college-level is offered for a small subset of students, and all English courses below college-level have been removed from the class schedule. (English as a Second Language course sequences continue to be developed.)

In May, students received notices regarding how their summer and fall schedules would be impacted, and counselors are currently ready to help them navigate the transition. Faculty are prepared to provide extra assistance to students who need it, and the new equity dashboard that Kollross’ team rolled out across the campus gives faculty, administration, staff, and student support services, a subject-by-subject live feed of three key success indicators: success, retention, and enrollment.

The administration and faculty are working more closely, too, finding common ground in their students. This fall, the college will launch a new Center for Equity and Professional Learning for employees, formalizing the training that began three years ago, and the prospect of using guided pathways — as the next avenue for equity — is on the horizon.

“For years, we’ve been telling our incoming students, ‘Welcome to college, you can do this,’ but with our actions we’ve been saying, ‘We’re not so sure,’ and we’ve been putting them in pre-college classes,” Olivo said. “This new approach shows more clearly to our students that we believe in them.”

Five Factors to Deeper Understanding of Guided Pathways Implementation: Summary of Report by Dr. Robert Gabriner

Summary by RP Group Staff

In February of this year, the State Chancellor’s Office Executive Vice Chancellor, Laura Hope, asked Dr. Robert Gabriner (Director, Leading from the Middle) to investigate how other states were addressing implementation of Guided Pathways (GP). The report that he compiled, “Factors Enabling and Constraining Implementation of Guided Pathways” provides some additional perspectives to the complex process of implementing a full transformation of the college delivery of instruction and student services, and some of these perspectives may be useful as California continues to embark on these efforts.

The report lands on 21 factors and barriers to successful guided pathways efforts on a campus level, organized by Dr. Gabriner, into five categories:

- Organizational Culture
- Leadership
- Budgets
- Understanding Change (or the capacity to understand change and to act on it)
- External Stakeholders

“Of these factors, the first four often play the biggest role,” said Gabriner. “These are not your plain vanilla factors. This is a different way to assess capacity of college to move slowly or quickly in the implementation of GP.”
Organizational Culture
Culture is one of the driving factors of success or failure in almost every facet of our modern organizations, including in both nonprofit and for-profit sectors. Our institutions are not exceptions, according to Gabriner. The following table depicts factors that both enable and impede the success of guided pathways in California Community Colleges.

<table>
<thead>
<tr>
<th>Enablers</th>
<th>Barriers</th>
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<tbody>
<tr>
<td>Experienced executive leaders</td>
<td>New and/or inexperienced executive leaders</td>
</tr>
<tr>
<td>Stable long-term executive leaders</td>
<td>High turnover of executive-level leaders</td>
</tr>
<tr>
<td>Strong experienced middle leadership</td>
<td>Weak inexperienced middle leadership</td>
</tr>
<tr>
<td>Distributed leadership</td>
<td>Hierarchical leadership</td>
</tr>
<tr>
<td>Supportive and informed trustees</td>
<td>Trustees unengaged or skeptical of guided pathways</td>
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Leadership
Experienced and committed executive and middle leadership are critical factors where implementation has been succeeding. Those interviewed stressed the importance of a commitment to collaborative distributed leadership.

Understanding Change
One of the key success factors is the degree to which all levels of campus employees understand what transformative change means, and that leaders and champions must develop a high tolerance for ambiguity, and to be able to fail many times in the long haul journey to successful implementation.

<table>
<thead>
<tr>
<th>Enablers</th>
<th>Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open to new ideas and innovation</td>
<td>Insular and traditional</td>
</tr>
<tr>
<td>Experience with change strategies and reforms</td>
<td>Unfamiliar with change strategies and reforms</td>
</tr>
<tr>
<td>Ad hoc work teams and committees</td>
<td>Traditional academic governance only</td>
</tr>
<tr>
<td>Institutional resources for reassigned time</td>
<td>Limited to no resources for planning and implementation of reforms</td>
</tr>
<tr>
<td>Frequent and effective use of qualitative and quantitative data to make case for equity and structural change</td>
<td>Little use of data to discuss reforms and change strategies</td>
</tr>
<tr>
<td>High tolerance for ambiguity and willingness to take risks</td>
<td>Lack of willingness for risk-taking</td>
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Budgets
While most colleges facing declining revenues hunker down, there are a few using dwindling revenues as the basis for reorganization of both instructional and student services deliveries.

<table>
<thead>
<tr>
<th>Enablers</th>
<th>Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declining enrollments seen as an opportunity to restructure the delivery of educational services</td>
<td>Declining enrollments as a distraction to implementation of guided pathways and ultimately to suspending implementation</td>
</tr>
<tr>
<td>Guided pathways funding treated as transformative investments to permanently reform the delivery of educational services</td>
<td>Guided pathways funding treated as a special categorical as a supplement to regular operations</td>
</tr>
<tr>
<td>Funding for time for faculty/staff to plan and implement reforms</td>
<td>Limited to no resources for time for faculty/staff to plan and implement reforms</td>
</tr>
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External Stakeholders
Often, when colleges begin to plan for GP, they instinctually turn to a collaboration with internal stakeholders. However, they would be better situated and able to
accommodate both first-year students and students who swirl within the system, if they also engaged external partners: high schools, universities, and other campuses within their district.

For questions about this report, please contact Dr. Robert Gabriner at gabriner@sfsu.edu.