



March 2015

Placed for Success

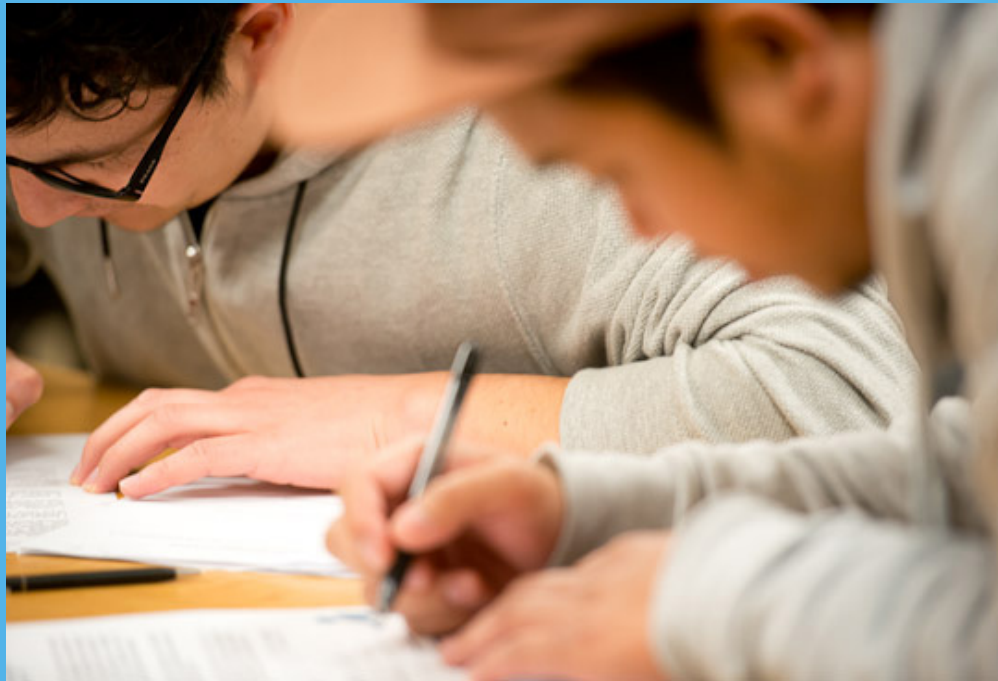
How California Community Colleges can improve accuracy of placement in English and math courses, reduce remediation rates, and improve student success

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Nationally, approximately two-thirds of students attending community college are identified as unprepared for college-level academics and are assigned to pre-college remedial (also known as developmental) courses.¹ Remediation rates are even higher among students of color.² The majority of these students leave college before ever attempting a college-level course in English or mathematics.³ New evidence suggests that many students placed into remedial coursework would have been able to succeed in college-level courses without remediation.⁴

"I got my test results and I cried. It was going to take me years to get through math alone. I thought to myself, will I ever graduate from community college?"
– Community college student⁵

In California and elsewhere, community colleges are changing assessment and placement practices to reduce unnecessary remediation and improve college success. Emergent research has cast doubt on the predictive value of placement exams to determine preparedness for college, suggesting that their traditional use may actually constitute a barrier to college completion.⁶

This brief summarizes key research findings of use to community college practitioners interested in rethinking assessment and placement practices.⁷ It explores the use of multiple measures for improving placement—a strategy that is supported by evidence, has traction in the field, and has the potential to both lower remediation and maintain student success rates in college courses.

A Holistic Approach

Using multiple measures increases placement accuracy, minimizing the need for remediation.

Historically, standardized placement tests have been the primary basis for determining whether community college students are assigned to college-level or to remedial courses.⁸ However, recent studies show that using a single standardized test, such as the ACCUPLACER or the COMPASS test, to make placement decisions leads to a high error rate in predicting whether a student can succeed in college-level courses.⁹ For example, a rigorous 2012 study by Scott-Clayton, Crosta, and Belfield found that one in every three students assigned to English and one in every four students assigned to mathematics were misplaced. Scott-Clayton et al. also found that the number of students underplaced in remedial classes was five to six times higher than the number of students overplaced in college-level courses.¹⁰ Similarly, a 2012 study by Willett and Karandjeff of several California community colleges found that GPA and grades in math and English courses had much higher utility compared with standardized tests in predicting college course success.¹¹

One in every 3 students assigned to English and 1 in every 4 students assigned to mathematics were severely misplaced.

(Scott-Clayton & Belfield, 2012)

Colleges and state systems are implementing a range of measures to more accurately capture the potential of students to perform college-level

work. The most commonly used measures are high school GPA, grades in specific high school math or English courses, and the successful completion in high school of college transition courses.¹² Emergent research also suggests that self-reports of students' grades provide a surprisingly accurate indication of actual course grades when high school transcripts are unavailable.¹³ State systems and individual colleges also are combining measures—such as GPA, high school grades in math and English, and standardized assessments—to make placement decisions, typically utilizing one of the following methods as a reform strategy:

1. Construct a formula that uses a combination of measures for placement. Each measure can be weighted equally or differently, depending on the efficacy of the measure in predicting student success in college-level courses. This often is determined by conducting an analysis of data from previous student cohorts. For example, at Long Beach City College, measures are combined into a formula that places greater weight on GPA and high school grades in math and English than on placement test scores because studies found

that these measures were better predictors of college-level course success.

2. Use measures hierarchically. Rely on a primary measure for all students and use supplementary measures when additional proficiency data are needed. For example, in the North Carolina Community College System, colleges first consider high school GPA and only use standardized tests for students who fall below a certain threshold.

The implementation in California of the Common Core State Standards for K-12 education represents a new opportunity to address alignment and improve placement. In California this current academic year (2014-15), the Smarter Balanced Assessment Consortium (SBAC) test will replace California's STAR assessment in the Early Assessment Program (EAP). The SBAC is pursuing a common definition of college readiness across institutional segments. This early assessment provides an additional measure that colleges could use to evaluate preparation for college-level academics.

Strategies in Action

North Carolina reforms its placement policy statewide.

North Carolina's new statewide placement policy exempts all recent high school graduates from remediation within five years of graduating high school if they have a GPA of 2.6 or higher.¹⁴ For students who do not meet the GPA threshold, or for those without a recent high school GPA, colleges will grant an exemption based on SAT or ACT scores. If a student's score falls below the SAT or ACT threshold, then he or she will be assessed

using a diagnostic placement test that the College Board has developed under contract with the North Carolina Community College System (NCCCS). NCCCS proposed the new placement policy after working with the Community College Research Center (CCRC) at Columbia University to analyze data on the accuracy of the current placement testing compared with alternate measures, such as GPA. The researchers matched high school transcript data with community college transcript and place-








In North Carolina, research showed that the placement error rate could be cut in half if GPA was used instead of standardized tests. (Belfield & Crosta, 2012)

ment testing data on students and found that the current standardized tests resulted in many students being unnecessarily placed in remedial math and English. The CCRC study found that the placement error rate could be cut in half if placement decisions were based on

“Why was I placed in this class? I felt like I learned it in kindergarten.”
 – Community college student¹⁵

<p>GPA instead of standardized tests scores. In developing the policy, math and English faculty and researchers worked together to find an appropriate GPA threshold to use to place students.¹⁶</p> <p>Long Beach City College deemphasizes the placement exam with impressive gains for students.</p> <p>In 2011, Long Beach City College’s institutional researchers analyzed historical data on Long Beach Unified School District graduates who went to the college directly after high school.¹⁷ The research indicated that traditional stan-</p>	<p>At Long Beach City College, placement in college-level courses increased from 15% to 60% in English and from 10% to 30% in math with no change in college course success rates. (Hetts, 2014)</p>	<p>as part of its Promise Pathways Initiative, Long Beach City College developed a multiple measures assessment formula that weighs student high school achievement and standardized assessments in proportion to their utility in predicting student performance in college courses.¹⁸</p> <p>Using this new formula, placement into college-level courses increased from 15 percent to 60 percent in English and from 10 percent to 30 percent in math, while student success rates in these courses were similar to that of previous student cohorts.¹⁹</p>
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Comparison of Different Measures of Student Success
While standardized assessments provide a single and consistent measure for student placement, they are neither strong predictors of college success nor intentionally aligned with high school curricula.

MEASURE	Predictive of college success	Aligned with HS curricula	Consistent	Measure Implemented by states and/or community colleges
Standardized assessments (ACCUPLACER/COMPASS)			YES	Most common assessment, (nationwide)
High school GPA			NO	North Carolina Massachusetts Hawaii Long Beach City College
Math/English courses and grades			NO	Long Beach City College
Smarter Balanced Assessment Consortium test	Unknown		YES	Washington State

 LOW  MEDIUM  HIGH

Note: Information on the predictive power of various measures is based on the following studies: Scott-Clayton, 2012; Belfield & Crosta, 2012; Bahr et al., 2014; and Willett & Karandjeff, 2014. Information on implementation by state or college is based on Bracco et al. (2014).

The California Context

In California, education regulations clearly mandate that community colleges use multiple measures in their placement processes. While the history of California legislation and regulation regarding assessment practices is complex, a consistent feature has been the expectation that colleges use tests as advisory, rather than as a determining or singular factor in student placement decisions. The Seymour-Campbell Matriculation Act of 1986—and a subsequent out-of-court settlement of a suit against the California Community College system by the Mexican American Defense Fund (MALDEF)²⁰—attempted to address concerns that the colleges were using placement testing in an exclusionary manner that disproportionately impacted African American and Latino students. Subsequent regulations²¹ required that the state community college system evaluate placement tests for bias, and stipulated that the colleges use placement tests only in an advisory manner.²² However, concerns persist about the use of placement exams, particularly given the wide variation in the measures and cut scores used and the relatively heavy emphasis placed on assessment exams compared to other measures.²³

Working closely with the state community college system, the California legislature in 2012 included matriculation and assessment processes among the key issues to be addressed via the state’s Student Success Act (Senate Bill 1456). The system as a result established an implementation task force to develop a common assessment instrument for use across all its colleges,²⁴ established a workgroup on multiple placement measures, and has begun developing the data infrastructure necessary for making indicators of high school academic achievement readily available to colleges.²⁵ In addition, with a growing body of independent research questioning the accuracy of traditional placement



tests, the Academic Senate for California Community Colleges reaffirmed its support for the use of multiple measures for placement.²⁶

The stage is set in California for large-scale change. Yet, even before these system-wide changes come to fruition over the next several years, colleges and districts can push effective practices forward. The time is ripe for practitioners to identify, test, and grow approaches that improve placement accuracy and increase student success. Demonstrating these approaches now can serve to inform the system changes to come.

Recommendations for Implementation

As community college practitioners consider reforms to assessment and placement, the following recommendations provide a starting point:²⁷

1. **Analyze historical data** from the college and its feeder high schools to understand remedial placement rates and students’ progression through the remedial sequence. Also examine the current rates of college-level course completion within one or two years of enrollment.²⁸

2. **Bring together community college math and English faculty, other key stakeholders, and institutional research staff** to discuss the college's own data as well as research evidence from other colleges that have implemented transcript-based placement strategies.
3. **Create opportunities for cross-sector collaboration** by bringing together community college and high school math and English faculty to align college readiness expectations and discuss high school students' preparation under the Common Core State Standards. Concrete projects to create dual enrollment or high school transition courses in math and English can create a great platform for collaboration.
4. **Pilot and evaluate** the implementation of multiple measures—including high school GPA and grades—for placement. Compare outcomes for students placed via multiple measures (including high school GPA and grades) versus placement exams alone. Outcomes may include a change in time spent in remediation, in college-level course success rates, and/or credential completion rates.

These strategies, together with other emergent reforms, have significant potential to improve college completion rates at community colleges—and to do so quickly.

There is substantial work being done across the country to transform developmental education more broadly, such as contextualizing developmental courses within broad fields of study; combining several levels of remediation into accelerated courses; creating differentiated pathways by discipline; and integrating supplemental academic support with college-level courses.²⁹ Additionally, community colleges are reexamining the instructional approach utilized in developmental education. Such work is part of a host of innovations being explored to better meet the needs of underprepared students. Yet, assessment and placement influence success at a more fundamental level. Course placement determines how long it will take for students to progress through college and, for many, predicts whether they will complete a college credential. Improved accuracy in student placement is an important, immediate step that community colleges can take to empower more students to complete their educational goals.

In California, education regulations clearly mandate that community colleges use multiple measures in their placement processes.

Policy or Practitioner Focused Resources:

Where to Begin? The Evolving Role of Placement Exams for Students Starting College

Pamela Burdman

Please see: <http://www.jff.org/publications/where-begin-evolving-role-placement-exams-students-starting-college>

What We Know About Developmental Education Outcomes

Shanna Smith Jaggars and Georgia West Stacey

Please see: <http://academiccommons.columbia.edu/item/ac:170486>

One Shot Deal?: Students' Perceptions of Assessment and Course Placement in California's Community Colleges

Andrea Venezia, Kathy Reeves Bracco, and Thad Nodine

Please see: http://www.wested.org/online_pubs/oneshotdeal.pdf

Self Assessment of an Effective Community College/K 12 Partnership: Interactive Tool

Laurie Scolari, Rachel Antrobus, and Linda Collins

Please see: <http://www.careerladdersproject.org/wp-content/uploads/2014/01/H2C-Partnership-Self-Assessment-Tool2.pdf>

Key Research Studies:

Multiple Measures for Assessment and Placement (White Paper)

Peter Bahr, Craig Hayward, John Hetts, Daniel Lamoree, Mallory Newell, Nathan Pellegrin, Ken Sorey, and Terrence Willett

Please see: https://www.bakersfieldcollege.edu/sites/bakersfieldcollege.edu/files/MMAP_WhitePaper_Final_9-10-14.pdf

Exploring the Use of Multiple Measures for Placement into College-level Courses: Seeking Alternatives or Improvements to the Use of a Single Standardized Test

Kathy Reeves Bracco, Mina Dadgar, Kim Austin, Becca Klarin, Marie Broek, Neal Finkelstein, Susan Mundry, and Dan Bugler

Please see: http://www.wested.org/wp-content/files_mf/1397164696product55812B.pdf

First Generation Students of Color: Easing Their Transition to Community College

Laurie Scolari

Please see: <http://gradworks.umi.com/35/45/3545586.html>

Improving the Targeting of Treatment: Evidence from College Remediation

Judith Scott Clayton, Peter M. Crosta, and Clive Belfield

Please see: <http://ccrc.tc.columbia.edu/publications/improving-the-targeting-of-treatment.html>

Stepping Up: Progression in English and Math from High School to College

Terrence Willett and Kelley Karandjeff

Please see: <http://www.rpgroup.org/sites/default/files/RPSteppingFinal.pdf>

End Notes

1 Author derived data from the U.S. Department of Education, National Center for Education Statistics, BPS: 2009, *Beginning Postsecondary Student Study*, using the NCES QuickStats tool. According to the Beginning Postsecondary (BPS) data from 2009, about 68 percent of students who began at a public two-year college took one or more remedial courses in the six years after their initial college entry. BPS contains student-level data on a nationally representative sample of students who enrolled in college for the first time in the 2003-04 school year, tracked to 2009.

2 See Bailey, Jeong, & Cho, 2010.

3 Developmental completion rates vary according to remedial level. Only 17 percent of students referred to the lowest level of developmental math complete the sequence; 45 percent of those referred to the highest level complete the sequence (Bailey, Jeong, & Cho, 2010). Recent quasi-experimental studies on the effectiveness of remedial courses suggest that these courses generally delay students' access to college credit courses and have mostly negative effects on credential attainment (Martorell & McFarlin, 2011; Scott-Clayton & Rodriguez, 2012; Dadgar, 2012).

4 For more information, see Belfield & Crosta, 2012; Hanson & Hern, 2014; Scott-Clayton, 2012; Scott-Clayton, Crosta, & Belfield, 2012; Willett & Karandjeff, 2014.

5 Community college student voice, Scolari, 2012.

6 See for example Burdman, 2012; Venezia, Bracco, & Nodine, 2010.

7 This brief focuses on the use of multiple measures for placement. For a discussion of other assessment and placement reforms underway in community colleges, see Burdman, 2012.

8 In 2009, 62 percent of community colleges used the ACCUPLACER assessment developed by the College Board, while 46 percent used the COMPASS assessment developed by ACT, Inc.; some colleges used a combination of the two tests (Scott-Clayton, 2012). For a qualitative study of the factors that affect colleges' use of assessments, see Hodara, Jaggars, & Karp, 2012.

9 See Belfield & Crosta, 2012; Scott-Clayton, 2012; Willett, 2013; Scott-Clayton, Crosta, & Belfield, 2012.

10 According to Scott-Clayton, Crosta, and Belfield

(2012), underplacement is defined as remedial placement for a student who could earn a B or higher in a college-level course. Overplacement is defined as being placed into a college-level course and failing the course.

11 Also see Bahr et al., 2014.

12 Other measures that also have been used (though less frequently) are non-cognitive assessments, self-reported work/life experiences, essay exams, counselor inputs, and results from additional tests. With the Common Core, aligned assessments also may be used for placement once their use as a college-ready measure is validated.

13 See Gibbons & Meuschke, 2014.

14 It should be noted that in North Carolina, high school students are required to complete four math classes in high school, including Algebra II. Most states require fewer math courses during high school.

15 Community college student voice, Scolari, 2012.

16 Information in this section is based on a personal interview with Cynthia Liston, Associate Vice President of Policy Research and Special Projects, North Carolina Community College System (NCCCS).

17 The college combined its improved placement strategy with an array of other interventions to improve student outcomes (including requiring full-time attendance and completion of a success plan). As a result, it is difficult to evaluate the effect of the improved placement strategy in isolation. LBCC's experience does suggest that the implementation of improved placement strategies should be one component of an overall reform effort to reduce remediation and maintain course success rates.

18 For more information on the LBCC Promise Pathways strategies and outcomes, see <http://lbcc.edu/promisepathways/>.

19 See Promise Pathways Initiatives' outcomes at <http://lbcc.edu/promisepathways/>.

20 In 1991, the Mexican American Legal Defense and Education Fund (MALDEF) challenged the inequity of placement based on a single standardized test. Subsequently, Title 5 of the California Code of Regulations was revised to mandate the use of multiple measures in placement decisions (Grimes-Hillman, Holcroft, Fulks, Lee, & Smith, 2014).

21 For regulations related to multiple measures in the California Community Colleges, see especially Title 5, Section 55522(a) and Section 55502(i) of the California Code of Regulations. California laws for community colleges are contained in the state Education Code.

22 Over the years, funding to support implementation of these requirements has been highly variable. With cutbacks to funding and reduction in support for college matriculation services over this time period, the test validation requirements in particular were seen as onerous by many in the colleges (Wiseley, 2006). Regulation changes adopted by the Board of Governors in 2011 relaxed the requirement for statistical validation in the setting of prerequisites in favor of content validation, but did not alter the requirement for the use of multiple measures for placement.

23 A recent survey of the California Community Colleges found that the majority of colleges have not been able to implement the use of multiple measures, except for cases where a student has challenged his or her placement decision. See Venezia, Bracco, & Nodine, 2010.

24 A prior bill, the Common Assessment Act (AB743) of 2011, required the California community college system to establish common assessment tests in English, math and English as a second language (ESL) for use by all the colleges. Funds provided to implement the 2012 Student Success Act enabled the system to launch the Common Assessment Initiative.

25 To address potential challenges for colleges to receive and digitize high school transcript information for incoming students, the California Community Colleges Chancellor's Office will be supporting the development of a Multiple Measures Data Warehouse that can help colleges automatize placement decisions based on high school transcripts and other indicators of achievement, such as the EAP and CST results, AP scores, and local college assessment and placement results.

26 In the Fall of 2013, the Academic Senate passed a resolution in support of using multiple measures for placement, arguing that given the recent research findings, the use of standardized assessments "simply for the sake of consistency and efficiency may not be justified" (Academic Senate for California Community Colleges, 2013).

27 These are Career Ladders Project's recommendations based on experiences of colleges in California

and elsewhere with implementing improved placement and similar strategies. As more of our partner sites implement improved placement demonstrations, we will systematically document and synthesize lessons learned in a forthcoming document. Some of the individuals who have informed the current recommendations include: Cynthia Liston, Associate Vice President of Policy Research and Special Projects, North Carolina Community College System; Maureen Carew, Former Director of the San Francisco Promise and Bridge to Success, San Francisco Unified School District; Laurie Scolari, Former Dean of Counseling, Student Support, Outreach and Recruitment, City College of San Francisco; and Ken Sorey, Project Director, Cal-PASS Plus.

28 For more nuanced questions, community colleges and their feeder high school districts in California can submit data request letters for de-identified individual-level data from Cal-PASS Plus. Currently, the Cal-PASS Plus dataset includes students from all community colleges and 70 percent of students from high schools in California. The expectation is that, gradually, more and more high schools will be uploading their data to Cal-PASS plus.

29 For more information, see Hodara, Jaggars, & Karp, 2012.

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The authors are grateful to the following experts for providing feedback on this document:

Marty Alvarado, Long Beach City College

Pamela Burdman, Independent Policy Analyst

Maureen Carew, John W. Gardner Center, Stanford University

Elizabeth Gonzales, James Irvine Foundation

Katie Hern, Chabot College

Michelle Hodara, Education Northwest

Shanna Jaggars, Community College Research Center, Teachers College, Columbia University

Kris Palmer, Career Ladders Project

Laurie Scolari, Career Ladders Project

Regina Stanback Stroud, Skyline College

Alice VanOmmeren, California Community Colleges Chancellor's Office

Andrea Venezia, Education Insights Center

The authors acknowledge Roy Robles for production, and Caroline Moyer, Alison Nakashima, and Tasha Rassuli Jackson for production and research assistance.

The funding for this brief was provided by the James Irvine Foundation.

Design: Mike Nicholls and Liz Mayorga

Photography: Dan Figueroa and Eli Zaturanski

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Career Ladders Project

The Career Ladders Project fosters educational and career advancement through research, policy initiatives, and strategic assistance to community colleges—and their education, workforce and community partners.

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