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INSTITUTE OF CALIFORNIA

**NOVEMBER 2016**

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*Supported with funding from  
The Sutton Family Fund*

# Determining College Readiness in California's Community Colleges

A Survey of Assessment and Placement Policies



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Technical appendices to this paper are available on the PPIC website.

Every year, California’s community colleges identify hundreds of thousands of students as not ready for transfer-level courses in math and English. Since these courses are required to transfer to a four-year college, students deemed underprepared are placed in developmental (also known as remedial or basic-skills) courses to prepare for college work. Placement has a profound effect on students’ college trajectory: a sizeable portion of developmental education students do not finish their developmental sequences, and most never earn a degree or transfer.

To improve student outcomes, campuses are changing how they determine who has direct access to transfer-level courses. This study presents results from a survey of assessment and placement policies at California’s community colleges in 2014–15 to inform ongoing efforts and provide a baseline of current policies. We find that:

- **Colleges vary in how they identify college-ready students.** Colleges use different assessment tests and, even with the same test, apply different rules for the minimum scores that qualify as college ready. For example, while more than half of colleges reported using the Accuplacer test to assess college readiness in math, cut scores ranged from 25 to 96 out of 120. A student with a score of 58 on this test would be deemed college ready at only half of these colleges. This wide variation may be especially challenging for the 40 percent of students who eventually enroll in more than one community college campus. We also find that students of color, especially African American students, are more likely to attend colleges that set higher math cut scores and thus have more restrictive access to transfer-level math courses, potentially leading to broader inequities.
- **Colleges should be more consistent in the use of multiple measures.** The state mandates that community colleges use measures in addition to assessment tests to inform placement—research shows that measures such as high school achievement data do a comparable or better job at predicting college success. While some colleges use multiple measures in a systematic way, others only use multiple measures if students request it or challenge their placement. Uneven implementation of multiple measures may aggravate inequities if students with cultural and social capital are more likely to take advantage of these policies.
- **Assessment and placement in English as a Second Language (ESL) needs more attention.** Six percent of incoming community college students (about 30,000 students annually) enroll in ESL, and these students may be especially disadvantaged by current policies. Fewer colleges offer exemption opportunities and test preparation activities in ESL, compared to

math and English. Additionally, our findings suggest that a lower proportion of colleges use high school achievement data for ESL placement, indicating that English Learners may not be benefitting from one of the most promising methods of improving placement accuracy.

State support has led to encouraging reforms. California’s community colleges are moving toward a common assessment, and research efforts are underway to develop recommendations for the use of multiple measures. In addition to assessment and placement reforms, many colleges are starting to redesign their developmental sequences to boost student completion. The PPIC report *Preparing Students for Success in California’s Community Colleges* examines this set of reforms and provides an overview of enrollment and outcomes in developmental education.

Assessment and placement policies should help students reach their academic goals—not stand in the way of those goals. As colleges work to enhance the efficacy of developmental education, implementing evidence-based practices that accurately assess students’ college readiness will be critical. A more equitable and efficient system for assessment and placement is a vital step in helping all students achieve their academic goals.

# Introduction

One in every five community college students in the country is in California. With 113 colleges located across the state, California Community Colleges (CCC) is the nation's largest system of higher education and a critical entry point to higher education in the state. Every year, hundreds of thousands of new students enter the state's community colleges with the goal of earning a degree or certificate, or transferring to a four-year institution.

Community colleges provide postsecondary access to anyone age 18 and older, regardless of prior academic achievement. This open-door policy inevitably means that students arrive with a wide array of skills and interests. Among the first responsibilities colleges undertake is helping new students determine their appropriate placement within the college curriculum. Assessment and placement policies govern how colleges across the state determine where students begin their college trajectory. Research finds that students' point of entry into math and English course sequences has a profound impact on whether students finish these courses (Bailey, Jeong, and Cho 2010). Therefore, one of the highest-stakes decisions made at this stage is whether or not students are prepared for transfer-level courses in math and English.<sup>1</sup>

Students identified as college ready will be granted direct access to the transfer-level curriculum and can immediately begin earning credit toward a degree. However, those identified as underprepared are referred to one or more developmental (also called remedial or basic-skills) math, English, and/or English as a Second Language (ESL) courses to develop the skills necessary for success in transfer-level work.<sup>2</sup> Underprepared students are limited in their ability to earn credits toward a degree, as they are initially unable to enroll in credit-bearing courses that have English and math prerequisites. Therefore, assessment and placement decisions about students' readiness for college have significant implications for their educational journey. In California's community colleges, nearly 80 percent of students are identified as being underprepared. Only 44 percent of developmental math students successfully complete the developmental sequence, while 60 percent of developmental English students do so. Moreover, only 16 percent of underprepared students complete a degree or certificate and only 24 percent transfer after six years, compared to 19 percent and 65 percent, respectively, of their college-ready peers (Cuellar Mejia, Rodriguez, and Johnson 2016).

Despite the critical role of assessment and placement, there is little clarity about how colleges across the state assess and place students into math, English, and ESL sequences. Prior studies conducted in California relied on a small sample of community colleges and examined policies in place before 2010 (Bunch et al. 2011; Melguizo et al. 2014). The existing systemwide surveys also reviewed policies and practices from over six years ago (Regional Educational Laboratories 2011; Venezia, Bracco, and Nodine 2010). These studies generally found that community colleges used placement tests extensively, but cut-off scores for placement varied a great deal across campuses. Additionally, results showed that the use of other student achievement measures for placement was sparse and unsystematic. Researchers argued that such variation in policies and practices could hinder student success. In recent years, there has been significant movement toward reform. Prompted in part by the 2011 Student Success Task Force Recommendations, the CCC system has been planning and implementing reforms to assessment and placement via the Common Assessment Initiative, which will establish a shared assessment to be used for placement across campuses (described in more detail in the next section).

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<sup>1</sup> In this report, we use the term "transfer level" when discussing math and English course placements. While the term "college level" is often used interchangeably with "transfer level," in California there is an important distinction, as not all college level courses transfer to four-year colleges or universities. This distinction is especially important when discussing placements in math, as intermediate algebra is not transferrable, but it counts toward the completion of an associate degree. We use the terms "college ready" or "college readiness" to denote the level of preparation a student needs to enroll and succeed—without developmental education—in credit-bearing courses.

<sup>2</sup> See Cuellar Mejia, Rodriguez, and Johnson (2016) for an analysis of the length and structure of developmental math and English sequences.

In this context of emerging reforms, this report presents findings from a new Public Policy Institute of California (PPIC) survey of assessment and placement in California’s community colleges. The broad goal of the survey is to provide policymakers and practitioners with a descriptive landscape that will improve understanding of the policies used across the state to assess and place students into math, English, and ESL courses, prior to the implementation of reforms associated with the Common Assessment Initiative. The main research questions guiding this survey are:

- What policies and practices do California Community Colleges use to assess and place students into transfer-level math and English courses?
- What policies and practices do California Community Colleges use to assess and place students into the highest level of ESL courses?<sup>3</sup>

Insights gleaned from the survey can inform the implementation of upcoming assessment and placement reforms that will affect millions of students across the state. Since about half of colleges currently use the same assessment but set different cut scores for readiness, the survey results will also help guide policymaking and shed light on the consequences of these policies. The results also provide an important baseline for future PPIC surveys to examine changes after reforms have been implemented. Finally, while prior research has documented assessment and placement policies in math and English, very little is known about how the system assesses students and places them into ESL. This report aims to help fill this information gap.

First, we provide background on assessment and placement in California’s community colleges and describe the survey design and administration. We then present survey results identifying the different measures used to assess the math, English, and ESL skills of incoming students, and the ways in which these measures were used to determine appropriate placement during the 2014–15 academic year. Next, we present findings on the types of changes to assessment and placement policies and practices under discussion at colleges across the state. The report concludes by discussing policy implications emerging from the survey findings and identifying directions for future research.

## Background

Recent research has found that the assessments commonly used at colleges across the country are not strongly predictive of student success in college-level courses (Scott-Clayton 2012; Scott-Clayton, Crosta, and Belfield 2014). In fact, these tests tend to underplace students, meaning students are placed into developmental courses when they could have passed college-level courses. This is especially concerning because research indicates that being incorrectly assigned to developmental education may divert students into a separate track and discourage them from achieving their academic goals (Scott-Clayton and Rodriguez 2015). Recent research from California and other states shows that high school grades and other pre-existing student achievement data could do a comparable or better job than placement tests at predicting success in college-level courses (Multiple Measures Assessment Project 2015; Ngo et al. 2013; Scott-Clayton 2012; Scott-Clayton, Crosta, and Belfield 2014; Willett 2013).

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<sup>3</sup> Only colleges using a separate assessment test for placement into the ESL sequence responded to the ESL portion of the survey. This represents 91 percent (75 of 82) of all participating colleges. Unlike English, which has a fairly standard multi-course sequence of developmental English that feeds directly into transfer-level English, ESL sequences vary substantially in length, structure, and the manner in which they feed into transfer-level English. Therefore, a decision was made to collect survey data about policies and practices for placement into the highest level of ESL and subsequently ask about the pathway from the highest level of ESL to transfer-level English. See findings in this report on ESL assessment tests for more information.

## PPIC's Assessment and Placement Survey

PPIC developed and administered a survey of community colleges to address the following questions:

- What policies and practices do California Community Colleges use to assess and place students into transfer-level math and English courses?
- What policies and practices do California Community Colleges use to assess and place students into the highest level of ESL courses?

The survey process benefited from PPIC's substantial experience developing and conducting Statewide Surveys on various topics. It also benefited from extensive feedback from the California Community Colleges Chancellor's Office assessment staff and assessment committee members, as well as researchers from the RP Group, the Multiple Measures Assessment Project, the Education Insights Center, and the Career Ladders Project. During spring 2016, PPIC administered the survey online via Qualtrics to staff in assessment, student services, and/or institutional research departments at all 113 of California's community colleges. The survey attained a response rate of 73 percent (82 of 113 colleges). Colleges responding to the survey enroll a total of 77 percent of full-time equivalent students in the system and are representative of urban, suburban, and rural colleges in the state.

The survey gathered information about assessment and placement policies in place during the 2014–15 academic year. Specific topics included test preparation activities; exemption policies; the various measures used to assess the math, English, and ESL skills of incoming students; how the measures are used in combination to determine appropriate placement; retesting policies; and planned changes to policies and practices. Our analysis of the survey data identifies similarities and differences among assessment and placement policies across colleges and subject areas. This report also highlights innovative strategies, including the use of multiple measures, to improve assessment and placement of incoming community college students.

More detailed information about the survey design and administration, as well as the survey instrument itself, is presented in the [Technical Appendices](#).

Concerns about the current assessment and placement system and growing interest in improving college completion have led institutions, systems, and states across the country—including California, North Carolina, and Virginia—to implement reforms (Common Assessment Initiative 2015; Kalamakarian, Raufman, and Edgecombe 2015; Rodriguez 2014). In California, prompted by the 2011 Student Success Task Force Recommendations, the CCC system has established the Common Assessment Initiative (CAI).<sup>4</sup> This initiative includes the adoption and implementation of common assessment instruments in math, English, and ESL, as well as the use of more robust multiple measures (i.e., other criteria in addition to placement exams). The specific objectives of the CAI reforms are as follows:

- Develop a common assessment test for math, English, and ESL for use at all California Community Colleges.
- Increase the portability of scores and reduce need for reassessment.
- Improve the effectiveness and accuracy of placement.
- Lower remediation rates and increase direct access to transfer-level placements.

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<sup>4</sup> See the [California Community College Common Assessment Initiative website](#) for more information.

- Increase student awareness and preparation for the assessment test.
- Help improve local assessment and placement practices.
- Reduce the cost of assessment and placement activities at colleges and districts.
- Leverage multiple measures data and research to improve the accuracy of placement.

The common assessment, known as CCCAssess, is the product of collaborative efforts undertaken by a steering committee and several work groups comprised of individuals representing the system office and colleges across the state. The groups collaborated to determine the content to be assessed, select the test vendor, develop the test, and oversee the piloting and validation process. The CCCAssess will be phased in over the next several years.

While adopting the common assessment is not technically mandatory, adoption has implications for funding. Specifically, the Student Success Act of 2012 (Senate Bill 1456) requires colleges assessing students to use the common assessment as a condition for receiving Student Success and Support Programs (SSSP) funding.<sup>5</sup> Since this funding is central to the provision of student services aimed at increasing student access and success, it is unlikely that colleges will opt out.

The CAI is intended to create a common assessment system, not a common placement system. This distinction is important. The local governance and decision-making autonomy that California’s community colleges have—and the variation across colleges in both the length of developmental education sequences and curricular approaches—suggests that placement rules into colleges’ math, English, and ESL curricula will continue to be locally determined.

While colleges are free to implement the policies they deem most appropriate for their campus, there are efforts underway to inform these choices, especially in regards to the use of multiple measures. Specifically, the Multiple Measures Assessment Project (MMAP), which joined forces with the CAI in 2015, has engaged in extensive research, planning, and piloting efforts to provide colleges with recommendations on which multiple measures to use and what rules to employ for placement into math, English, and ESL (MMAP 2016).<sup>6</sup> The MMAP rules are based on the use of high school records (e.g., grades in math/English courses, high school grade point average or GPA, and state standardized test scores) and their ability to predict success in college math, English, and ESL courses. The MMAP recommends that multiple measures be used disjunctively with the local assessment system measures (e.g., assessment scores, the Early Assessment Program results, Advanced Placement test scores, etc.). Students should receive a placement based on the local assessment system and multiple measures and should be given the higher placement if there is a discrepancy. For instance, if English assessment scores place a student in developmental writing, but self-reported or transcript data suggest a 11th or 12th grade GPA of 2.6 or better, then the student would be placed into transfer-level English.

Legislative efforts tied to funding—including the Student Success Act of 2012 and the Community College Basic Skills and Student Outcomes Transformation Program grants—have helped to support engagement in the assessment and placement reforms described above (Legislative Analyst’s Office 2016).<sup>7</sup> A renewed focus on the critical role of assessment and placement in student success has greatly facilitated these conversations at the state, system, and college levels.

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<sup>5</sup> See the [Overview of the SSSP Handbook](#) for more information on the goals of the initiative and details about how funding is intended to be used.

<sup>6</sup> The MMAP is a collaboration between the Research and Planning Group for California Community Colleges (RP Group) and Education Results Partnership. The MMAP research team comprises data scientists from the RP Group and Educational Results Partnership. See the [Multiple Measures High School Variables Model Summary](#) for detailed information on multiple measures placement rules.

<sup>7</sup> Grants also provide support for reforming remediation and student supports that accelerate completion of degrees and career goals of underprepared students. The idea is to redesign curriculum, career pathways, and assessment and placement through a combination of the following activities: (1) multiple measures, (2) co-requisite courses, (3) program of study alignment, (4) contextualization, (5) integrated student support, and (6) community college and K–12 collaboration for alignment. The main outcomes of interest include completion of transfer-level English or math and earning a degree/certificate.



# Assessment and Placement Measures Vary Widely

## Measures Used in Assessment and Placement

Colleges across the country have traditionally used standardized exams to assess the math and English skills of incoming students (Hughes and Scott-Clayton 2011). Placement exams are sometimes used in combination with other criteria—such as high school records, instructor or counselor recommendations, and other standardized tests—to determine appropriate placement within the college curriculum. A national survey of assessment and placement policies conducted in 2011 found that 100 percent of public two-year colleges used a placement exam for math, and 94 percent used a placement exam for reading. In contrast, only 19 percent and 27 percent of public two-year colleges used other criteria in addition to placement exams to determine appropriate placement in reading and math, respectively (Fields and Parsad 2012).

In the CCC system, the use of assessment tests is widespread—100 percent of colleges reported using an assessment test for math, English, and ESL placement. The survey also found that the majority of colleges use additional criteria to determine placement into math (94%), English (90%), and ESL (52%). This is significantly higher than the national average because the use of other measures in addition to placement exams is mandated in Title 5 of the California Code of Regulations (Academic Senate for California Community Colleges 2014).<sup>8</sup>

The assessment measures in the PPIC survey were identified in consultation with the academic literature, researchers, practitioners, and pilot survey respondents.<sup>9</sup> In addition to assessment tests, the measures included high school GPA, grades in prior English and math coursework, results from the Early Assessment Program (EAP), counselor or instructor recommendations, and non-cognitive assessments.<sup>10</sup> Survey respondents also had an opportunity to identify other measures used. We learned that colleges frequently used other information about a student's background to guide assessment and placement decisions in specific disciplines. For example, in ESL, colleges used information about the number of years students had been in the United States and whether their last English class was in ESL.

In 2014–15, colleges used, on average, three measures to assess and place students in English and math courses, and two measures to assess and place students into ESL courses. Though assessment tests were standard practice, there was substantial variation in the types of other measures used across the three subjects (Figure 1). This section of the report presents the findings for each of the measures used in more detail. Overall, these findings support prior research in California's community colleges that found widespread use of assessment tests as well as sparse and unsystematic use of multiple measures (Bunch et al. 2011; Melguizo et al. 2014; Regional Educational Laboratories 2011; Venezia, Bracco, and Nodine 2010).

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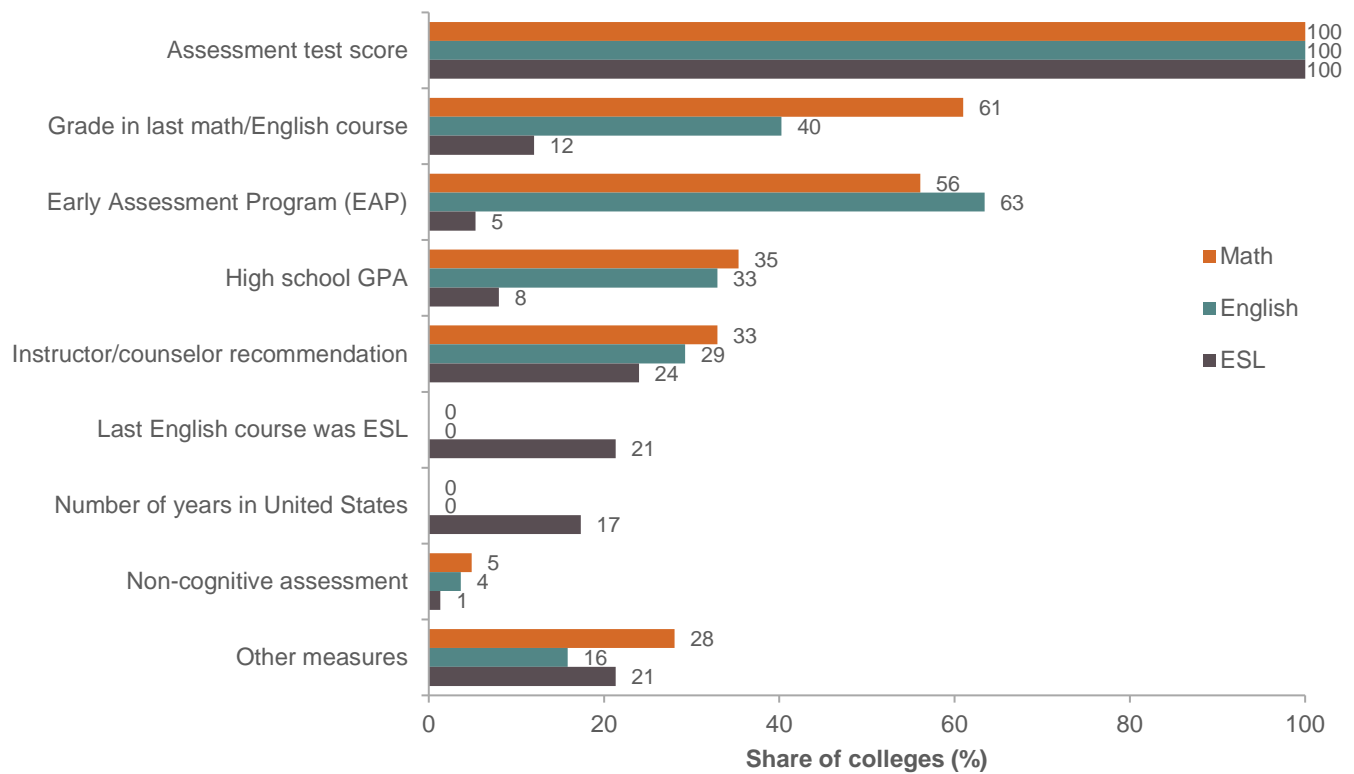
<sup>8</sup> This mandate was a result of a Mexican American Legal Defense and Education Fund lawsuit that was settled out of court over concerns that assessment tests disproportionately placed Latino students into lower-level courses (Ngo et al. 2013).

<sup>9</sup> See [Technical Appendix B](#) for the survey instrument used in the study.

<sup>10</sup> Non-cognitive assessments are used to gauge students skills in areas that are important to college success (e.g., time-management, academic self-confidence, decision making, persistence, etc.), but not captured by standardized assessments of academic skills.

**FIGURE 1**

Colleges use a variety of measures for placement, but all rely on assessment tests



SOURCE: PPIC Survey of Assessment and Placement in California Community Colleges, 2016.

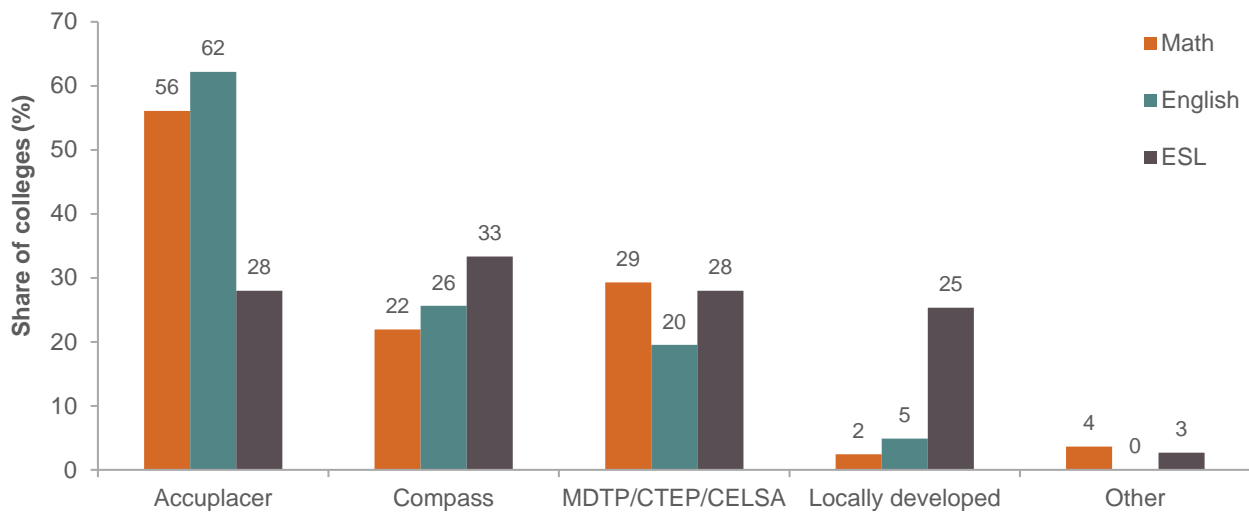
NOTES: Sample size for English and math is 82; sample size for ESL is 75. Only colleges with a separate ESL assessment test reported using "Number of years in United States" and "Last English course was ESL."

## Use of Assessment Tests in California Community Colleges

While all campuses reported using an assessment test to assess students' skills in math, English, and ESL, the type of placement instrument varied across colleges and subject areas. This range is expected since colleges can independently select an assessment test as long as it meets validity standards. As shown in Figure 2, over half of colleges used the Accuplacer—a computer adaptive test developed by the College Board—to assess math and English skills. In contrast, in ESL, there was a more even split across the top four types of placement instruments used. It is important to highlight that even among colleges that reported using the same assessment test, we find substantial variation in the way they used the results to inform the placement process—this again is expected given the local governance structures and autonomy colleges have to set and implement placement policies. In the next sections, we discuss findings for the use of assessment tests by subject.

**FIGURE 2**

More than half of colleges use the Accuplacer for placement into math and English



SOURCE: PPIC Survey of Assessment and Placement in California Community Colleges, 2016.

NOTE: The MDTP is used for math, the CTEP is used for English, and the CELSA is used for ESL.

### Math assessment tests

The most commonly used assessment test for math was the Accuplacer. It was used by more than half of the colleges (56%). Additionally, we find that 28 percent of colleges reported using the University of California’s Math Diagnostic Test Project (MDTP) and 22 percent of colleges reported using ACT’s Compass assessment.<sup>11</sup> Fewer than 5 percent of colleges reported using a locally developed or other type of math assessment. These findings support prior research that identified the top two math assessment instruments used by colleges in the system as the Accuplacer and the MDTP (Regional Education Laboratories 2011; Venezia, Bracco, and Nodine 2010).

**There is consistency in the math skills tests used to place students into transfer-level math.** Across the three most commonly used assessment tests, nearly all colleges (more than 94%) based placements into transfer-level math on students’ performance on the college-level math or intermediate algebra subject tests. At nearly half of colleges that used Accuplacer and three-quarters of colleges that used Compass and MDTP, students could also place into transfer-level math using algebra and pre-calculus assessments.<sup>12</sup>

**The cut scores used for placement into transfer-level courses vary considerably.** This study supports findings from prior research that has found substantial variation in the minimum test score required for placement into transfer-level math (Venezia, Bracco, and Nodine 2010). For example, Table 1 shows that colleges using the Accuplacer College Level Mathematics exam reported cut scores ranging from 25 to 96 (out of 120), with a median cut score of 58. This variation in cut scores implies that students’ access to transfer-level math is determined by not only their performance on the test, but also where they enroll. A student with a score of 58 would be eligible for transfer-level math at half of the colleges using the Accuplacer, but not at the other half. Prior research has found that, indeed, students have experienced different placements at different colleges based on the same assessment scores (Venezia, Bracco, and Nodine 2010). Additionally, findings from a descriptive analysis of the characteristics of colleges with high versus low cut scores suggest that students of color may

<sup>11</sup> Note that the ACT Compass assessments will be discontinued in November 2016. In response to this, colleges using the Compass will be transitioning to the common assessment or one of the other approved assessment instruments.

<sup>12</sup> While the survey did not specifically ask colleges if they assess students in statistics, no colleges reported assessing these skills on the “Other” write-in category.

experience stricter access to transfer-level math courses by virtue of attending colleges that set higher cut scores (see text box on the following page).<sup>13</sup>

**TABLE 1**

Cut scores for placement into transfer-level math and English courses vary considerably

Assessment Test	Math: college-level math exam				English: reading comprehension exam			
	Low	Median	High	Scale	Low	Median	High	Scale
Accuplacer	25	58	96	20–120	51	84	100	20–120
Compass	43	48	66	1–99	26	77	89	1–99
MDTP	16	25	33	0–45	-	-	-	-
CTEP	-	-	-	-	21	25	28	0–35

SOURCE: PPIC Survey of Assessment and Placement in California Community Colleges, 2016.

NOTES: Cut scores listed are for the most commonly used skills tests in math (college-level math/intermediate algebra) and English (reading comprehension). Math and English cut scores are for placement into transfer-level math and English, respectively.

**Retesting policies are flexible but not uniform across the state.** Consistent with previous research, we find that while nearly all colleges (93%) reported having a retesting policy in place, the amount of time that students must wait to retest varied considerably (Venezia, Bracco, and Nodine 2010). Colleges with retesting policies reported a range, from no wait time to three years before allowing students to retest. The median amount of time a student had to wait prior to retesting was 90 days.

The wait time between tests can be put to good use if colleges help students prepare. Several colleges reported inviting students who placed into developmental math to participate in a math skills workshop prior to retaking the test. In addition, at some institutions, students may choose to enroll in the developmental math curriculum prior to retesting. Over half of the colleges (56%) reported allowing students to retest after they begin the math sequence. This approach can be seen as a way to brush up on skills prior to retesting and can potentially result in students skipping levels of developmental math. Still, it is important to keep in mind that prior research has found that wait times that are too long can be detrimental to students if they result in missed registration deadlines or if students retest and place at the same level (Venezia, Bracco, and Nodine 2010).

<sup>13</sup> T-tests and Chi square tests were performed to assess the statistical significance of the difference in means of student and institutional characteristics, including race/ethnicity, gender, age, low-income status, and assessment and placement policies, among others. See [technical appendix Table A3](#) for results.

## Same Assessment, Different Cut Scores

Colleges that use the same assessment and different cut scores present a case study of what is to come with the Common Assessment Initiative (CAI). Under CAI reforms, colleges across the state use a common assessment, but will have the flexibility to locally determine the placement standards for what it means to be college ready. Using results collected from this survey as well as data from the Integrated Postsecondary Education Data System (IPEDS) and the Chancellor's Office, we examine the characteristics of institutions setting higher versus lower cut scores—that is, stricter versus broader access to transfer-level courses—as defined by falling above or below the median, respectively. To help paint a more complete picture, we also use PPIC survey data to examine the differences in the other assessment and placement policies across these two groups of colleges.

Findings from this analysis suggest that differing placement policies may contribute to inequitable access to transfer-level courses. In particular, colleges with lower math cut scores have a higher proportion of white students (37% compared to 28%) and a slightly lower proportion of African American students (7% compared to 12%)—these differences are statistically significant. The proportions of Latino and Asian/Pacific Islander students are also slightly lower in colleges with broader access to transfer-level math, but this difference is not statistically significant. In English, the only statistically significant finding is that colleges with lower cut scores tend to have a higher proportion of Asian/Pacific Islander students (17% compared to 10%). Unlike in math, it appears that Latino and African American students are slightly more represented at colleges setting lower English cut scores, while white students are slightly less represented, but these differences are not statistically significant. This analysis did not find statistically significant differences between colleges with lower and higher cut scores in other student characteristics we examined, including gender, age, and low-income status.

In examining other placement policies and practices, we find little evidence of significant differences between colleges setting higher versus lower cut scores for English, but wide-ranging differences in policies for math. In particular, we find that colleges with broader access to transfer-level math had a lower average wait time for retesting (102 days versus 201 days), used about one more multiple measure (3.7 versus 2.8), and were more likely to use high school records and other measures for placement, but less likely to use the EAP. Additionally, we find that colleges with broader access to transfer-level math had fewer opportunities for exemption, compared to colleges setting higher cut scores (2.4 versus 3.9). These findings suggest that colleges with broader access to transfer-level math tend to provide fewer opportunities for students to skip the assessment process via an exemption process, but use a greater variety of multiple measures to help determine readiness for transfer-level math.

This does not provide causal evidence on the impact of having lower versus higher cut scores. But this descriptive analysis does hint at the possibility that unless students of color are able to benefit from the slightly more numerous opportunities for exemption, they may be experiencing stricter access to transfer-level math courses by virtue of attending institutions that set higher cut scores in greater numbers. Additionally, students attending colleges with higher cut scores may experience further restricted access as a result of retesting and multiple measures policies. These findings suggest future research should thoroughly examine the equity implications of assessment and placement policies, paying special attention to math. Additionally, research should examine why similar patterns do not emerge for English. It is possible that the slightly smaller sample of colleges (33 versus 40) used in our analysis affected our ability to uncover any significant differences. Future research using a larger sample should help us better understand whether English policies are equitable.

Full results are presented in [technical appendix Table A3](#) and [Table A4](#).

## English assessment tests

As with math, the most commonly used assessment test for English was the Accuplacer (62% of colleges) (Figure 2). At a distant second and third, 26 percent of colleges reported using the Compass and 20 percent reported using the College Test for English Placement (CTEP). Additionally, 5 percent of colleges reported using a locally or campus-developed assessment, often consisting of an essay, in addition to one of the other standardized assessments. These findings suggest that the use of the Accuplacer and Compass has increased, while the use of locally developed exams has decreased, since 2009, when 49 percent, 17 percent, and 20 percent of colleges, respectively, reported using these assessments for placement into the English sequence. The use of the CTEP remained about the same (Venezia, Bracco, and Nodine 2010).

**Multiple English skills are assessed to determine placement.** Colleges reported assessing multiple English skills, including reading comprehension, sentence skills, grammar skills, and writing skills, to help determine placements into the English curriculum. For the top three most used assessment tests, nearly all colleges (90–100%) used a student’s performance on reading comprehension to determine placement into transfer-level English. In addition, over 94 percent of colleges using the Accuplacer and CTEP also used the sentence-skills portions of the assessments to determine placements. At colleges using Compass, the use of additional skills assessments was more evenly split: 38 percent reported using the sentence-skills test, and 38 percent reported using the grammar-skills test. A smaller share of colleges reported using the writing portions of the Accuplacer (14%), Compass (14%), and CTEP (6%); all locally developed exams in English involved writing samples, often consisting of an essay.

**The cut scores used for placement into transfer-level English vary considerably.** Despite the fact that more than 60 percent of colleges reported using the same placement instrument for English, there was substantial variation in the minimum test score required to place into transfer-level English. As with math, these results suggest not much has changed on this front in more than six years, as a 2009 survey yielded similar findings (Venezia et al. 2010). Table 1 shows that colleges using Accuplacer’s reading comprehension exam reported cut scores ranging from 51 to 100 (out of 120), with a median cut score of 84. As with math, this variation implies that, at least in the lower ranges, students’ access to transfer-level English is partially determined by the assessment and placement policies at the college where they matriculate. What is more, similar to math, findings from the descriptive analysis of colleges with high versus low cut scores suggest students from different backgrounds may experience differential access to transfer-level courses simply by virtue of where they attend (see text box on previous page).

**Retesting policies are flexible but there is substantial variation across the state.** While 91 percent of colleges reported having a retesting policy in place for English, the amount of time that students must wait to retest varied widely. These findings are in line with prior research and suggest retesting policies have not changed considerably in more than six years (Venezia et al. 2010). Colleges with retesting policies reported a range from no wait time to and three years before retesting. The average amount of time students had to wait prior to retesting was 149 days, and the median was 90 days. Additionally, 52 percent of colleges reported allowing students to retest in English after having begun the developmental English sequence; this can potentially result in students skipping levels of developmental English.

## ESL assessment tests

Unlike in math and English, we find that no single assessment is used by a majority of colleges to assess the ESL skills of incoming students.<sup>14</sup> Survey results indicate that the use of various standardized assessment tests for ESL placement was much more evenly distributed across colleges in the state, with the top three instruments used being Compass (33%), Accuplacer (28%), and the Combined English Language Skills Assessment (CELSA) (28%) (Figure 2). A locally developed assessment was used by 25 percent of colleges; this assessment was most often used to supplement one of the other three tests. Overall, we find less consistency in assessment and placement policies for ESL, compared to math and English.

**Multiple ESL skills are assessed for placement, but which skills and how they are assessed vary substantially.** To help determine ESL placement, colleges reported using standardized assessments and/or locally developed exams to assess reading comprehension, sentence skills, grammar skills, listening skills, and writing skills. Colleges can assess these skills using separate skills tests or a combined skills test. The use of a combined skills test that assesses listening, reading, and grammar skills was more common among CELSA (38%) and Compass (28%) users and less common among Accuplacer users (14%). Across Compass and Accuplacer users, it was far more common to determine ESL placements using students' performance on a combination of separate skills tests, most commonly reading, grammar, and listening. Colleges also assessed writing skills, but tended to use a locally developed writing sample rather than the writing portion of the three assessments (68% versus 12–14%). Counselors and assessment coordinators at several institutions specifically noted that the writing sample served as a multiple measure for placement.

**Varying ESL pathways makes comparing cut scores in ESL across colleges unhelpful.** While cut scores for placements into transfer-level English provide a standard benchmark for comparing what it means to be college ready in English, a parallel comparison is not possible for ESL. Colleges use ESL assessments for placement within their ESL curriculum, and the pathways leading from the ESL curriculum to transfer-level English vary widely across campuses. The survey asked for the cut scores that determine placement into the highest level of ESL. But results revealed that this level is not the same across the state.<sup>15</sup> Survey respondents at 44 percent of colleges indicated the highest level of ESL leads directly to transfer-level English, while another 36 percent reported that the highest level of ESL leads to developmental reading and/or writing courses one or two levels below transfer-level English. A few colleges also noted that their highest level of ESL was itself a transfer-level course, while two colleges reported that their highest-level ESL course led to developmental reading and/or writing courses that were three or four levels below transfer-level English. Given that ESL sequences are generally longer than developmental English sequences, the variation in ESL pathways to transfer-level English is likely to have important implications for the outcomes of English Learners. The number of levels of pre-collegiate coursework that ESL students need to complete before transfer-level English will partially depend on curricular and placement policies at the institution where they enroll. This is an area ripe for further research as little is known about English Learners and their educational trajectories.

**Retesting policies were less clear and consistent for ESL.** While 91 percent of colleges reported having retesting policies for English assessments, fewer than three-quarters reported doing so for ESL. This may partly be due to the respondents' uncertainty in this area—17 percent did not report or were unsure about ESL retesting

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<sup>14</sup> The ESL portion of the assessment and placement survey asks colleges that use separate placement tests to assess the English skills and ESL skills to report the policies and practices used to place students into the highest level of the ESL sequence. Overall, 91 percent of colleges responding to the survey (75 of 82) reported using a separate assessment test to place students into the ESL curriculum.

<sup>15</sup> While comparing colleges with the same ESL pathway who also used the same instrument could solve this issue, our survey respondent sample fitting this description is too small to conduct a meaningful examination.

policies, whereas all respondents reported information about retesting policies in English.<sup>16</sup> Among colleges that reported having an ESL retesting policy, the amount of time that students must wait to retest varied considerably (between 1 and 379 days), but the range was smaller than for English. The average amount of time a student must wait prior to retesting was 160 days, and the median was 126 days. Additionally, 37 percent of colleges allowed students to retest after starting the ESL sequence, 35 percent did not, and 28 percent did not know or did not report this information. As noted previously, while the wait time and opportunity to retest can potentially allow students to brush up on their skills or skip levels of pre-collegiate coursework, it is important to keep in mind that research has found that excessively long wait times can hold students back if they result in missed registration deadlines or if students retest and place at the same level.<sup>17</sup>

### Colleges Use Raw Test Scores in a Various Ways

To assist with determining appropriate placement into math, English, and ESL, colleges described using assessment test scores in a variety of ways. While there were some similarities across subjects, the precise manner in which the scores were used differed slightly depending on the number of skills tests used for each subject. For instance, in math it was common to use results from a single skills test to place students (e.g., scores from the college-level math skills test). But for English and ESL, nearly all colleges reported using two or more skills tests (e.g., reading comprehension and sentence skills) to determine placement. These are the main ways colleges described using raw test scores for placement:

- **Raw scores with cut-off rules:** Across all subjects, colleges reported using standalone raw test scores for one or more skills tests, and corresponding cut-off rules for each, that were tied to placements into specific developmental or transfer-level math, English, and ESL courses. Among some of the skills tests used for math were arithmetic, algebra, and college-level math; in English and ESL, skills tests included reading comprehension, sentence skills, grammar skills, and listening. Raw test scores for each skills subtest were often considered alongside other measures as part of a broader placement process, usually in consultation with a counselor.
- **Raw scores combined across skills tests with cut-off rules:** For placement into English and ESL, colleges also reported combining raw test scores from multiple skills tests (e.g., reading comprehension and sentence skills) and using the composite scores to set cut-off rules for placement. The composite scores could be a simple sum of raw scores across the skills tests or a weighted sum of the scores. For the weighted sum, there was no general trend as to which skill received more weight—in some instances, reading comprehension was given more weight, while in others, sentence skills were more heavily weighted. Colleges frequently described using this approach in conjunction with other measures.
- **Raw scores with cut-off rules plus points for multiple measures:** This approach extends the two approaches described above by adding points to a student's raw score or combined raw score based on responses to educational background questions embedded in the assessment. This new score is then used for placement into math, English, or ESL. For example, a college may add one or more additional points to the raw score for earning a C or better in trigonometry or for a high school GPA of 3.0 or above. This new score is then used for placement into the curriculum.
- **Raw scores as an input for an algorithm or weighted formula:** A small group of colleges reported using the raw test scores and information about students' educational background as inputs in an algorithm or weighted formula. In this approach, placements into math, English, or ESL are determined based on the output of the algorithm or formula. Some colleges reported using a formula or algorithm developed by their institutional research office or consultants. The Multiple Measures Assessment Project uses a similar approach.

<sup>16</sup> While the ESL assessment was often administered by the same office and staff that administered the math and English assessment, we found that were more likely to be referred to the ESL department for more information about specific placement policies.

<sup>17</sup> See Venezia et al. (2010) for more on the implication of this finding for students.



## Test Preparation Activities

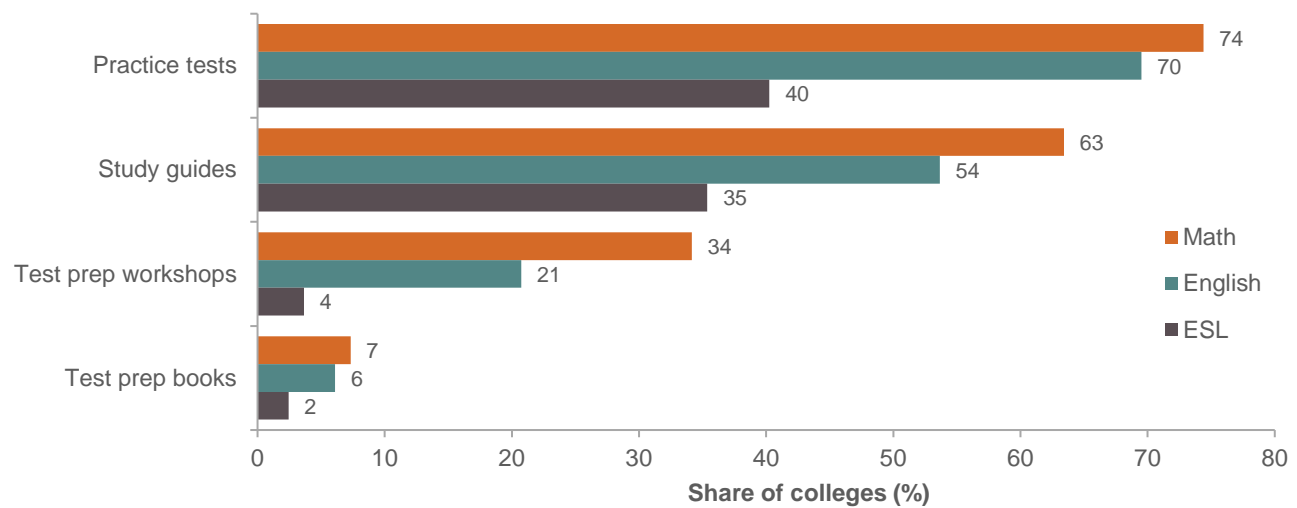
Research suggests that colleges can use test preparation activities to improve the accuracy of assessment and placement (Hodara, Jaggars, and Karp 2012). Our survey data show that test preparation activities for students have become more common over time and are now offered by almost all colleges (99%). In a 2009 systemwide survey of assessment and placement in California’s community colleges, 44 percent of colleges reported that they provided practice assessment tests for their students (Venezia, Bracco, and Nodine 2010). By the 2014–15 academic year, we find that over 70 percent of colleges reported using practice tests in math and English (Figure 3). Colleges also reported a variety of other test preparation activities, including study guides and links to web-based resources and online preparation materials, some of which are provided by the test maker or nonprofits such as the Kahn Academy. Some colleges reported referring students, especially those planning to retake the assessment, to the learning center for tutoring and “refresher” workshops. One college shared that it was piloting a two-week test preparation workshop for local incoming high school students.

Across the board, we find that test preparation activities were more common in math and English than in ESL. Specifically, in Figure 3, we see that while over 70 percent of colleges reported using practice tests for math and English, only 40 percent of colleges that assess ESL skills reported using practice tests. The survey also found that all test preparation activities are more common for math. This is likely due to higher rates of developmental math placements and the perception that math skills lend themselves more to testing and typically require more brushing up.

While test preparation activities have become more widely available to students, one unanswered question is whether students are taking advantage of these opportunities. One study found that even when colleges offered practice tests, many students did not use them, either because they felt the tests would not be helpful or because they were not aware of them (Venezia, Bracco, and Nodine 2010). More research is needed to examine whether test preparation activities are effective, and whether some approaches are better than others across subjects and student subgroups.

**FIGURE 3**

Test preparation activities are more common in math



SOURCE: PPIC Survey of Assessment and Placement in California Community Colleges, 2016.

## Multiple Measures

As previously noted, California mandates that community colleges use multiple measures for math, English, and ESL placement. On average, colleges reported using three measures to assess and place students into English and math courses, and two measures to assess and place students into ESL courses. However, as with the choice of assessment test, colleges are given the flexibility to determine which multiple measures to use and how to use them. As a result, it is not surprising that the survey finds significant variation in the use of additional measures across the three subjects. To give a sense of this variation, on one end of the spectrum, between 7 and 30 percent of colleges described math placement policies in which the use of multiple measures was initiated if students requested it or challenged their placement (see [technical appendix Table A5](#)). The following quote from a student services staff member describing a college's math placement policy captures this approach:

If students do not say anything about assessment test results then we just [stick with the placement]. If they feel it's not accurate then we go to the next level of evaluation, a counselor interview. Through [the] counselor interview process ... [counselors use students'] high school transcript, assessment test scores, [and other] measures of success [including] work, day/evening attendance, years since high school, and [other] responsibilities.

On the other end of the spectrum, another college describes systematically implementing multiple measures for student placement. This more comprehensive approach is captured in the following description provided by a student services administrator:

Students are placed into mathematics courses based on multiple measures which are part of an algorithm that factors in [raw test] score data and student self-reported [information] about the student's educational background such as high school GPA, highest level of math completed, and grades earned in math.

These two remarks provide a sense of the wide variation in the use of multiple measures. The rest of this section discusses the use of specific multiple measures in more detail, highlighting important variation across subjects and colleges.

**Grade in last math/English course.** For non-exempt students, colleges reported supplementing assessment test results with the grade from students' last high school math or English course to inform the placement decision. The grade received in the last high school math course was the second-most used measure (after test scores) for determining placement into transfer-level math, with 61 percent of colleges using it. In English and ESL, use of the grade in students' last English course was less common—40 percent of colleges reported using this measure for placement into transfer-level English and 12 percent for placement into the highest level of ESL. Across the three subjects, earning a C or better in the last English/math course was the most common standard among colleges that used this measure for placement; others reported that there was no minimum grade rule, but counselors considered the grade received along with other measures to make a placement recommendation. Across subjects, more than half of colleges applied this measure for all students, and about one-quarter applied them to recent high school graduates.<sup>18</sup> In addition, for English and math, between 12 percent and 18 percent of colleges reported using this measure upon student request or if students challenged their placement.

**High school GPA.** Colleges reported using average high school GPA to inform placement decisions of non-exempt students. Overall, we found some variation in the use of high school GPA across subjects. One-third of colleges reported using high school GPA for placement into transfer-level math and English, but only 8 percent reported doing so for placement into the highest level of ESL. Colleges reported using GPA data derived from self-reports or transcripts in a variety of ways. The minimum GPA rule used for placement into transfer-level math and English ranged from 2.5 to 3.5, with a median of 3.0. Across the three subjects, the greatest proportion

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<sup>18</sup> See [technical appendix Table A4](#) for survey findings on the students for which the measures were used.

of colleges reported using high school GPA for placement for all students (math 45%, English 67%, and ESL 83%); a smaller group of colleges reported using the measure for recent high school graduates (math 24%, English 22%, and ESL 17%). In addition, among colleges that used high school GPA for placement into transfer-level English and math, between 7 percent and 11 percent reported using this measure upon student request or if they challenged their placement.

**Early Assessment Program (EAP).** The EAP is the only measure identified by colleges for both exemption and placement—with slightly fewer colleges using the EAP for placement. In math and English, 63 percent and 67 percent of colleges, respectively, use the EAP for exemption, while 56 percent and 63 percent use it for placement. Colleges reported using the EAP for placement in a variety of ways. The majority of colleges using the measure for English (62%) and math (59%) reported accepting a “college ready” status for placement into transfer-level courses. Between 15 percent and 21 percent reported using the “conditionally ready” status for placement into transfer-level courses if the student had taken senior math or English. The greatest proportion of colleges reported using the EAP for recent high school graduates (math 50%, English 54%); another group of colleges reported using the measure for students that request it (math 30%, English 23%). Additionally, 23 percent of colleges reported using this measure for all students with EAP scores, and 7 percent to 8 percent reported using the EAP only when students challenged a placement. Finally, we find that only 5 percent of colleges used the EAP to inform placement into the highest level of ESL; this is not surprising given that the EAP was not developed to assess ESL skills.

**Instructor/Counselor recommendation.** Between one-quarter and one-third of colleges reported using instructor and/or counselor recommendations as an additional measure to help determine math, English, or ESL placements. In ESL, this was the second-most commonly used measure. In English and math, it ranked fifth. Across the three subjects, over half of colleges reported using this measure for all students, whereas between 11 percent and 22 percent used it only when students requested it or challenged their placement. Colleges frequently described using this measure in combination with other information. Across all subjects, colleges reported using counselor and student meetings to evaluate and discuss assessment scores and other background information to help determine a placement recommendation. In ESL and English, colleges also reported that instructors could make placement recommendations using a student writing sample taken during the first weeks of class. In ESL, instructor oral interviews were also cited as a way to help determine English proficiency and placement.

**Non-Cognitive assessment.** Few colleges reported using non-cognitive assessments for placement into math (5%), English (4%), or ESL (1%). Among those that did use such assessments, survey respondents did not report using standardized non-cognitive assessments. Instead, colleges reported using measures such as students’ own self-assessment of their study skills and the amount of time spent reading; one college also described using counselors’ perception of student motivation as part of the assessment and placement process.

**Measures unique to ESL.** The survey identified two measures that were unique to assessing and placing English Learners into the ESL curriculum. Among survey respondents, 21 percent of colleges used information about whether students’ most recent English course was in ESL, and 17 percent used information about the length of time students have been in the United States.

**Other measures.** Across subjects, other measures typically included the recency of students’ last math and English course, the amount of time spent studying or using math and English skills, students’ own assessment of math and English skills, as well as career and educational goals. In examining the data on colleges that reported using other measures, survey respondents were more likely to report ESL placements that were based on subjective measures, including perceptions of whether students feel comfortable speaking English, self-evaluations of English skills, and whether they speak English at home and work.

## Other Placement Policies

About half of the colleges reported having other placement policies in place to assess the math, English, and ESL skills of incoming students. The purpose of having other policies is to provide students and colleges with additional opportunities to inform the placement decision. For example, students sometimes have the option to challenge their placement with departments, or faculty may have the opportunity to make recommendations based on student performance on an exam or a workshop.

Table 2 displays these additional placement policies reported by survey respondents for math, English, and ESL. Across the three subjects, nearly one-quarter of colleges reported having departmental policies or practices in place—such as prerequisite challenges, in which students can petition the appropriate department to be placed in a higher-level course. Respondents noted that students challenging their placement can provide alternative evidence of readiness or take a departmental exam.

Additionally, 25 percent of colleges reported having faculty placement policies for ESL, compared to 13 percent in math and English. Faculty placement policies or practices generally provide faculty the opportunity to further assess readiness via student performance on a faculty-graded written exam or after student participation in a special preparatory workshop or course. A counselor at one college reported using instructor recommendations based on student performance in a grammar “brush up” course or a math “boot camp” to inform placement. Finally, very few colleges reported having students self-place into the math, English, or ESL curriculum—this is unsurprising given the wide range of placement policies already in place at colleges across the state.

**TABLE 2**

Nearly one-quarter of colleges reported departmental assessment and placement policies

	Math	English	ESL
Departmental policies	23%	23%	24%
Faculty policies	13%	13%	25%
Student self-placement	2%	1%	3%
Other	12%	16%	5%
None	55%	48%	47%

SOURCE: PPIC Survey of Assessment and Placement in California Community Colleges, 2016.

NOTE: Categories not mutually exclusive.

## Exemption Policies

Most community colleges provided incoming students with an opportunity to waive assessment in math, English, and ESL, if they meet certain requirements.<sup>19</sup> Table 3 lists the various measures used by colleges to exempt students from assessment. Colleges reported using a wide range of measures for exemption, including college admission exams (SAT, ACT), transfer-level subject proficiency exams (EAP, Advanced Placement, CLEP, International Baccalaureate), and transfer-level course completion at another college. Colleges also identified a number of other ways students could qualify for exemption from assessment testing.

In Table 3, we see similarity across the three subjects in the criteria used for exemption at college campuses. This suggests there is a relative degree of uniformity in the types of rules used to provide direct access to

<sup>19</sup> Students exempt from the assessment and placement process typically have direct access to introductory transfer-level courses. However, exempt students may still need to meet with an advisor in order to be placed into the most appropriate transfer-level courses.

transfer-level courses. However, while the types of measures used by colleges are similar for math and English, there are notable differences in the use of exemptions in ESL. For example, we find more exemption opportunities for math and English than for ESL: 95 percent of colleges reported using at least one measure to exempt students in math and English, while only 72 percent of colleges offered students the opportunity to waive testing in ESL.

On average, colleges reported using three measures to exempt students from assessment in math and English, while in ESL, the average number of measures used for exemption was less than one. While colleges may offer more than one exemption measure for each subject, students only need to meet the criteria for one of these measures to be exempt from assessment and placement in that subject. The three most commonly used measures for exemption emerging from survey for math and English were:

- Receiving a C or better in English and/or math at another college (93% of colleges).
- Scoring a 3 or higher on the AP exam in a relevant subject (e.g. Calculus or Statistics for a math exemption and English Language or Literature for an English exemption) (77–78%).
- Receiving a “college ready” or “conditionally ready” status on the Early Assessment Program (63–67%).<sup>20</sup>

In contrast, in ESL, the most frequently used exemption measure was as common as using none at all: 28 percent of colleges reported exempting students who completed a college English course with a C or better at another college, while another 28 percent reported no exemption policies for ESL. An additional 13 percent of colleges reported using student performance on the AP English Language or Literature tests for exemption.

On the other end of the spectrum, fewer than a quarter of the colleges reported using the SAT, ACT, IB, or CLEP exams to exempt students from the math and English assessment and placement process. In ESL, only 8 percent of colleges reported using the IB or the CLEP to exempt students; none reported using the ACT or SAT. This finding is not surprising given that there are fewer opportunities for ESL students to qualify for exemption in general, and neither the ACT nor SAT was developed to assess ESL skills.

About one-third of colleges reported providing additional measures for exemption in math; 15 percent and 17 percent reported using other measures for ESL and English, respectively. These other mechanisms typically included instances where a student had completed a degree at another accredited college or taken an assessment at another college. In the latter case, some survey respondents specified that they accepted assessment test scores from another community college, while others explicitly noted that they accepted scores from the California State University and University of California assessment tests.

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<sup>20</sup> Colleges also reported accepting the “standard exceeded” status on the EAP. A few colleges specifically noted that “conditionally ready” was only accepted if the student completed senior English or math.

**TABLE 3**

Colleges use various measures to waive or exempt students from assessment testing

Measure used for exemption	Math		English		ESL	
	% of colleges	Minimum criteria	% of colleges	Minimum criteria	% of colleges	Minimum criteria
Transfer-level math/English at another college	93%	"D" to "B"	93%	"D" to "C"	28%	"C"
AP exam	78%	3	77%	3-4	13%	3
Early Assessment Program	63%	college ready (67%) cond. ready (15%) not specified (17%)	67%	college ready (55%) cond. ready (18%) not specified (27%)	9%	college ready (43%) cond. ready (14%) not specified (43%)
IB exam	23%	4–6	20%	4–5	8%	4–5
CLEP	23%	50	20%	50	8%	50
SAT	17%	360–560	20%	390–600	-	-
ACT	16%	16–23	17%	19–23	-	-
Other <sup>21</sup>	34%	-	17%	-	15%	-
Do not exempt from assessment testing	5%	-	4%	-	28%	-
<i>Sample Size</i>	<i>82</i>		<i>82</i>		<i>75</i>	

SOURCE: PPIC Survey of Assessment and Placement in California Community Colleges, 2016.

NOTES: Categories are not mutually exclusive. The "minimum criteria" columns present the range of criteria used for each measure to exempt students from assessment testing; the text reports the mean criteria used. Parentheses following minimum criteria for the Early Assessment Program refer to the share of colleges using that level as the exemption standard. Abbreviations are used for the following measures: Advanced Placement (AP) exam, International Baccalaureate (IB) exam, College Level Examination Program (CLEP), Scholastic Assessment Test (SAT), and American College Test (ACT).

## Upcoming Changes to Assessment and Placement

The survey also asked about the types of changes to assessment and placement policies and practices that were under discussion at the college.<sup>22</sup> This question pertained to ongoing discussions as of spring 2016, when the survey was administered. Many of these changes are occurring in the context of the statewide CAI, while others are locally driven.

A lower proportion of colleges are considering changes to assessment and placement policies for ESL, compared to math and English. In fact, as of spring 2016, 16 percent of colleges reported having no discussions of changes at all for ESL, compared to 9 percent for math and English. An examination of the common assessment adoption and implementation schedule suggests that these colleges may consider it too soon to begin these conversations—most of the colleges that are not discussing changes are scheduled to adopt the common assessment later on in the multi-phase rollout; still, this does not explain the lower likelihood of having these discussions for ESL compared to math and English.

<sup>21</sup> Colleges reported completing a degree at another accredited college or taking an assessment test at another college among the other measures used to waive students from the assessment and placement process.

<sup>22</sup> It is possible that changes to assessment and placement policies and practices were underreported as some of these conversations may be taking place outside of the purview of the college staff responding to the survey.

**TABLE 4**

Most colleges anticipate changes to assessment and placement

	Math	English	ESL
Changes related to the CAI	84%	85%	77%
Changes in multiple measures	50%	44%	23%
Change in assessment instrument	30%	30%	31%
Change in college readiness standards	27%	28%	17%
Other changes	11%	10%	4%
None	9%	9%	16%

SOURCE: PPIC Survey of Assessment and Placement in California Community Colleges, 2016.

NOTES: Categories are not mutually exclusive. Colleges discussing changes related to the CAI reported having discussions in a combination of the areas affected by this reform (e.g., assessment instrument, standards and/or measures used). In the survey, colleges were provided an opportunity to identify specific areas they are planning to change. A small number of colleges only reported having discussions on other types of changes.

## Changes Related to the Common Assessment Initiative

Given that the CAI effectively mandates that colleges use the common assessment, it is not surprising that the majority of colleges reported having discussions related to the CAI. Specifically, we find the vast majority of colleges (84–85%) are having CAI discussions in math and English; a slightly lower share of colleges reported having these conversations for ESL (77%). This group of colleges reported having discussions on one or more of the different components of the reform, including changes to the assessment instrument, changes to the standards used for placement, and changes to the measures used for placement—though not all colleges specified the type of CAI changes under discussion. Below we consider the findings in more detail.

### Changes in multiple measures

Colleges reported ongoing discussions about changes to the multiple measures used to determine appropriate placement into math, English, and ESL. However, results suggest that the conversation is not happening evenly across subjects. We find that while half of colleges reported discussions about changes in multiple measures used for placement in math and 44 percent reported having these conversations for English, only 23 percent reported discussions about these changes for ESL. These findings may reflect uncertainty regarding whether changes to multiple measures will affect ESL students—a respondent at one institution expressed this concern. In other cases, colleges directly noted that changes to the multiple measures used would only affect placements in English and math.

Among the changes being discussed, across all subjects, colleges reported the use of high school records, including high school GPA and grades in English and math courses, as well as the inclusion of non-cognitive assessments. Colleges frequently reported that these conversations were happening within departments and/or as part of their participation in the Multiple Measures Assessment Project. Some colleges reported having these discussions as a means to augment an existing multiple measures policy, for example, by including non-cognitive measures or additional high school information.

### Changes in assessment instrument

About 30 percent of community colleges reported having institutional discussions about changes to the math, English, and ESL assessment instruments. In examining the CAI's CCCAssess implementation schedule, it appears the colleges that are scheduled to be early adopters were much more likely to report engaging in these discussions when the survey was administered in spring 2016 than those who are scheduled to adopt later on.

Additionally, colleges were much more likely to report discussions about changes to the math, English, and ESL assessment instruments if their college used the ACT Compass to assess these skills. This finding is to be expected as the Compass is scheduled to be phased out by November 2016.

### **Changes in college readiness standards**

Community colleges reported having ongoing discussions about changes to the placement standards or rules used to determine college readiness for math, English, and ESL. However, the results suggest that the conversations have not occurred evenly across subjects. While over one-quarter of colleges reported having discussions about changes in the standards used for placement in math and English, only 17 percent reported having these conversations for ESL. As with our finding on changes in the use of multiple measures, these results may reflect a lack of clarity about how changes to assessment and placement policies will affect ESL students. Furthermore, since colleges adopting the CCCAssess will need to determine their college readiness standards locally, the fact that so few are having these discussions early on or concurrently with changes to the assessment and measures used may be a cause for concern for both students and the system.

## **Policy Implications**

Given the large gaps in completion rates between prepared and underprepared students, effective and equitable assessment and placement policies are essential for improving student outcomes and narrowing achievement gaps. State legislation and college reforms are moving in a promising direction. In the 2016–17 budget, Governor Brown emphasized the need for improved policies and practices in this area by stating that one of the ways colleges should use Basic Skills Initiative funding is to implement practices that enhance the accuracy of placements into transfer-level courses. Additionally, the \$60 million provided in the 2015–16 budget as part of the Community Colleges Basic Skills and Student Outcomes Transformation Program also highlighted the use of evidence-based practices to redesign assessment and placement via the use of multiple measures.

Together with CAI reforms, these funding streams present important opportunities to boost student outcomes. Findings from this survey shed light on issues to consider as reform efforts move forward. Additionally, the survey data presented in this report provides an important baseline for future PPIC surveys to examine changes once the reforms have been implemented. In this section, we discuss the policy implications of the survey findings, drawing from policies and practices in other systems for further insight.

### **What It Means to Be College Ready Varies**

Survey results indicate that in 2014–15, over half of colleges used the Accuplacer assessment to determine placements into math and English. Yet within this group of colleges, we find substantial variation in the cut scores used to determine placement into transfer-level courses. This variation implies that whether students are designated college ready is partially determined by the placement policies at the institution where they enroll. Having clearer and more uniform policies across colleges for accessing introductory transfer-level courses (e.g., college composition, college algebra, and statistics, among others) is especially important because these courses are considered equal in the eyes of four-year institutions accepting them for transfer—variation in the standards used to access these courses dilutes this presumed equality. Still, it is important to note that greater uniformity regarding cut scores for transfer-level courses does not necessarily imply that the state’s community colleges should establish and apply uniform rules for placement into developmental education courses. Given the



substantial variation in both the length of the sequences and curricular approaches used in developmental education, it is advisable to continue to allow flexibility and local control over placement policies into those courses.

California State University (CSU) presents a compelling case study for a statewide system that has consistent assessment and placement policies for determining college readiness. Across the 23 universities in the CSU system, exemption policies are the same (and overlap with exemption measures used by California's community colleges), a common assessment and common cut scores are used for placement into transfer-level math and English courses, and individual CSU campuses are provided flexibility on the structure of developmental education sequences and placement into these courses (Burdman 2015). Additionally, the community college systems in the states of Virginia and North Carolina present examples of cases where assessment and placement reforms include setting systemwide cut scores for accessing transfer-level math and English courses (Kalamakarian, Raufman, and Edgecombe 2015; Rodriguez 2014). These policies were instituted in an effort to facilitate the transfer of students between campuses and to provide clear signals about what it means to be ready for transfer-level courses.

## **Assessment Results Should Be More Portable**

As it stands, the variability in cut scores used to determine college readiness across the system makes it challenging for students who enroll in more than one of California's community colleges over the course of their academic career. Given that almost 40 percent of community college students enroll at more than one campus, the decision of where to set the cut scores has significant implications for students' access to transfer-level coursework, their educational trajectory, and their likelihood of successfully completing a degree or transferring.

If portability of assessments is to be fully realized, assessment cut score policies could benefit from an approach similar to the one used by the Multiple Measures Assessment Project (2015, 2016), where research, planning, and piloting efforts have provided colleges guidance on which measures to use and what rules to employ. By setting clear and uniform policies for access to transfer-level courses, colleges, especially those within the same region, will begin to make assessment results more portable for students.

## **Variation in Policy May Contribute to Inequitable Access to Transfer-level Courses**

As the system moves forward in the adoption and implementation of the common assessment, it is important to consider the equity implications of placement policies, particularly around setting cut scores. In our descriptive analysis of colleges with higher versus lower assessment cut scores, we find that, in math, differing placement policies may contribute to inequitable access to transfer-level math courses, unless students are able to benefit from slightly more opportunities for exemption. Furthermore, we find that the students attending colleges with stricter access due to higher cut scores may further be faced with more restricted access as a result of retesting and multiple measures policies.

While this analysis does not provide causal evidence on the equity implications of having lower versus higher cut scores, it does hint at the possibility that students of color may be facing stricter access to transfer-level math courses by virtue of attending institutions that set higher cut scores. Further research using student-level data is needed to fully examine and understand the equity implications of assessment and placement policies and their effects on access and achievement gaps. Emerging research on this issue suggests that inequities arising from assessment and placement policies could potentially be mitigated by adjusting assessment testing standards. Evidence from Butte College demonstrates that lowering cut scores could lessen the inequities associated with

accessing transfer-level courses and significantly increase the number of students of color who complete transfer-level courses (Henson and Hern 2015).

## Multiple Measures Must Be Implemented Consistently

Despite having multiple measures policies on the books, our findings suggest between 7 and 30 percent of colleges described math and English placement policies in which the use of multiple measures was initiated if students requested it or challenged their placement (see [technical appendix Table A5](#)). It is easy to see how this can aggravate inequities if students with cultural and social capital are more likely to take advantage of these policies. Additionally, the process of challenging a placement decision can be confusing and time-consuming—time-constrained students with families and jobs may not pursue this option. As colleges move toward a common assessment and more robust use of multiple measures, they should take care to ensure their approach applies equally to all students—perhaps through the use of an algorithm or a semi-automated process that combines a student’s raw score with educational background data.

## ESL Needs Clearer and More Consistent Assessment and Placement Policies

Estimates indicate that 6 percent of incoming CCC students enroll in ESL coursework (about 30,000 students each year), with some colleges enrolling over 20 percent of incoming students in ESL (CCC Chancellor’s Office 2016). To improve assessment and placement policies across the system, colleges should address ESL in their reform efforts. A smaller proportion of colleges reported having discussions around changes to assessment and placement policies for ESL, compared to math and English. Additionally, in 2014–15, fewer colleges reported offering exemption opportunities for ESL and a smaller variety of measures were used to determine placements within the ESL sequence, compared to math and English. Since all colleges reported using placement tests, this finding suggests that ESL placement policies rely more heavily on assessment results.

Furthermore, in examining the use of multiple measures across subjects, our research supports prior work by Bunch and colleagues (2011), which found that multiple measures are not frequently used in placement decisions for English Learners. This suggests that English Learners may not be benefiting from what researchers have identified as one of the most promising ways to improve the accuracy of placements (MMAAP 2015). This is concerning and may ultimately hinder the postsecondary educational trajectory of English Learners in community colleges, a group that has been historically underserved and at-risk in California’s K–12 sector (Hill 2012). Recent developments by the MMAAP—namely, evidence-based decision rules for using high school grades for placement into the ESL sequence—may contribute to improvements in this space (MMAAP 2016).

## Conclusion

Assessment and placement policies should help students reach their educational goals, not serve as a stumbling block. Current reforms are promising. The Common Assessment Initiative provides a significant opportunity for colleges to reduce variation in the types of assessments used for placement, though it will not address variation in cut scores. And the Multiple Measures Assessment Project will offer evidence-based recommendations on the use of specific multiple measures and corresponding placement rules. As reform efforts move forward, several areas should be monitored closely, including whether efforts support greater consistency regarding how colleges

determine who is college ready, equitable access to transfer-level courses, systematic implementation of multiple measures, and assessment and placement in ESL courses.

As it stands, the lack of uniformity in the assessment of college readiness results in differential access to transfer-level courses and may contribute to unequal access for underserved students. Additionally, English Learners may be especially disadvantaged by current policies, as they have fewer opportunities to prepare for the test and their placements are generally determined using fewer measures. These findings highlight the need for additional research examining the effect of assessment and placement policies on achievement gaps, which would require longitudinal student-level data, including detailed demographic and assessment records.

To fully understand the impact of assessment and placement policies, it is important to realize the variation in math, English, and ESL sequences across colleges. To this end, PPIC has published a descriptive analysis of enrollment and outcomes in developmental math and English sequences (Cuellar Mejia, Rodriguez, and Johnson 2016). PPIC also plans to conduct research on ESL sequences in California's community colleges. Furthermore, ongoing research at PPIC is exploring the impact of new interventions in developmental education on student outcomes and achievement gaps for low-income and underrepresented groups.

Given the sheer number and diversity of students entering California's community colleges, it is crucial that colleges work to improve their assessment and placement policies. By using evidence-based measures and rules to determine college readiness—and implementing these policies consistently—reforms can help pave the way for a more equitable and efficient system that will benefit millions of students across the state.

## REFERENCES

- Academic Senate for California Community Colleges. 2014. "Multiple Measures in Assessment: The Requirements and Challenges of Multiple Measures in the California Community Colleges." Academic Senate for California Community Colleges.
- Bailey, Thomas, Dong Wook Jeong, and Sung-Woo Cho. 2010. "Referral, enrollment, and completion in developmental education sequences in community colleges." *Economics of Education Review* 29 (2): 255–270.
- Bunch, George C., Ann Endris, Dora Panayotova, Michelle Romero, and Lorena Llosa. 2011. *Mapping the Terrain: Language Testing and Placement for US-Educated Language Minority Students in California's Community Colleges*. Report prepared for the William and Flora Hewlett Foundation.
- Burdman, Pamela. 2015. *Degrees of Freedom: Probing Math Placement Policies at California Colleges and Universities*. Policy Analysis for California Education and LearningWorks.
- California Community Colleges Chancellors Office. 2016. "Student Success Scorecard."
- Common Assessment Initiative. 2015. "Common Assessment System."
- Cuellar Mejia, Marisol, Olga Rodriguez, and Hans Johnson. 2016. *Preparing Students for College Success in California's Community Colleges*. Public Policy Institute of California.
- Fields, Ray, and Basmat Parsad. 2012. *Tests and Cut Scores Used for Student Placement in Postsecondary Education: Fall 2011*. National Assessment Governing Board.
- Henson, Leslie, and Katie Hern. 2014. "Let Them In: Increasing Access, Completion, and Equity in College English." *Perspectives*, November/December. The Research and Planning Group for California Community Colleges.
- Hill, Laura. 2012. *California's English Learner Students*. Public Policy Institute of California.
- Hodara, Michelle, Shanna Jaggars, and Melinda Karp. 2012. *Improving Developmental Education Assessment and Placement: Lessons from Community Colleges Across the Country*. Columbia University, Teachers College, Community College Research Center. Working Paper No. 51.
- Hughes, Katherine L., and Judith Scott-Clayton. 2011. *Assessing Developmental Assessment in Community Colleges*. Columbia University, Teachers College, Community College Research Center. Working Paper No. 19.
- Kalamakarian, Hoori, Julia Raufman, and Nikki Edgecombe. 2015. *Statewide Developmental Education Reform: Early Implementation in Virginia and North Carolina*. Columbia University, Teachers College, Community College Research Center.
- Legislative Analyst's Office. 2016. *The 2015–16 Budget: California Community Colleges*. Presented to the Assembly Budget Subcommittee.
- Melguizo, Tatiana, Holly Kosiewicz, George Prather, and Johannes Bos. 2014. "How Are Community College Students Assessed and Placed in Developmental Math?: Grounding Our Understanding in Reality." *The Journal of Higher Education* 85 (5): 691–722.
- Multiple Measures Assessment Project. 2015. *Multiple Measures Assessment Project Spring 2015 Technical Report*. The Research and Planning Group for California Community Colleges.
- Multiple Measures Assessment Project. 2016. *Multiple Measures High School Variables Model Summary, Phase 2—Updated*. The Research and Planning Group for California Community Colleges.
- Ngo, Frederick, Will Kwon, Tatiana Melguizo, George Prather, and Johannes Bos. 2013. *Course Placement in Developmental Math: Do Multiple Measures Work?* University of Southern California.
- Regional Educational Laboratory. 2011. *1.2.110 Types of Multiple Measures Used in California Community College Mathematics, English, and English as a Second Language Course Placement: Summary Report of Survey Results*. WestEd.
- Rodríguez, Olga. 2014. *Increasing Access to College-Level Math: Early Outcomes Using the Virginia Placement Test*. Columbia University, Teachers College, Community College Research Center. Brief No. 58.
- Scott-Clayton, Judith. 2012. *Do High-stakes Placement Exams Predict College Success?* Columbia University, Teachers College, Community College Research Center. Working Paper No. 41.
- Scott-Clayton, Judith, Peter Crosta, and Clive Belfield. 2014. "Improving the targeting of treatment: Evidence from college remediation." *Educational Evaluation and Policy Analysis* 36, 371–393.
- Scott-Clayton, Judith, and Olga Rodríguez. 2015. "Development, Diversion, or Discouragement? A New Framework and New Evidence on the Effects of College Remediation." *Education, Finance and Policy* 10 (1): 4–45.

Venezia, Andrea, Kathy Reeves Bracco, and Thad Nodine. 2010. *One-Shot Deal? Students' Perceptions of Assessment and Course Placement in California's Community Colleges*. WestEd.

Willett, Terrence. 2013. *Student Transcript-Enhanced Placement Study (STEPS) Technical Report*. The Research and Planning Group for California Community Colleges.

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## ACKNOWLEDGMENTS

The authors thank the community college staff who participated in this survey—this work would not be possible without their valuable contributions. We also thank Andrea Venezia, Pamela Burdman, and Tim Nguyen for their excellent feedback on earlier drafts of the report. We appreciate the helpful comments of our internal reviewers Jacob Jackson and Laurel Beck, and the editorial support of Vicki Hsieh and Lynette Ubois. Any errors are our own.

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