

# Core College Evaluation

EXPLORING THE USE OF  
MULTIPLE MEASURES  
FOR PLACEMENT INTO  
COLLEGE-LEVEL COURSES

Seeking alternatives or improvements to the  
use of a single standardized test

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## WestEd's Evaluation of the Core to College Initiative

**Core to College: Preparing Students for College Readiness and Success** is a three-year initiative funded by the Lumina Foundation, the William and Flora Hewlett Foundation, the Bill & Melinda Gates Foundation, and the Carnegie Corporation of New York. Rockefeller Philanthropy Advisors serves as the fiscal sponsor.

Core to College's mission is "to facilitate greater coordination between K–12 and postsecondary education systems around implementation of the Common Core State Standards (CCSS) and aligned assessments." The initiative aims to foster shared ownership of college readiness by the K–12 and postsecondary sectors, including use of the CCSS-aligned assessments to determine a student's readiness for credit-bearing postsecondary courses. Core to College grants have been awarded to teams in Colorado, Florida, Hawaii, Indiana, Kentucky, Louisiana, Massachusetts, North Carolina, Oregon, Tennessee, and Washington.

Each of these state teams has designated an Alignment Director (AD) who is tasked with leading the Core to College work in the state. Through the consulting company Education First, Core to College offers one-on-one and cross-state technical assistance to these ADs. Together, the ADs make up the grant's Learning Network, which provides facilitated peer-to-peer support, information sharing, and multi-state technical assistance to grantee states.

WestEd is providing evaluation services over the course of the initiative. The evaluation plan is designed to synthesize the progress of the initiative and its participating states over the next few years, with a focus on the initiative's primary goals: creating statewide definitions of college and career readiness, using the PARCC and Smarter Balanced assessments to inform decisions about student placement into credit-bearing college courses, and aligning K–12 and postsecondary policies to the CCSS.

As part of its evaluation effort, WestEd has proposed to evaluate the initiative based on five action areas involved in changing policy and practices around the implementation of the CCSS and aligned assessments for improving college readiness. These action areas attempt to encompass the policy, practices, and people dimensions of the Core to College effort; they center around how the policy and practices involved in implementing the CCSS and the alignment of state assessment practices can improve students' readiness for college change over time. The five action areas are strategic planning, infrastructure, stakeholder engagement, policy and governance, and data and analysis.

Cross-state, multi-method, qualitative reports are at the center of the evaluation, which will systematically chronicle the progress of the initiative. Reports will focus on topics of interest to the funders; the Learning Network; and Education First, the initiative's technical assistance provider. These studies are intended both to illuminate promising strategies and to document challenges.

The WestEd evaluation team understands that each state is approaching the implementation of the CCSS with its own set of parameters and context: differing stakeholders, funding concerns, size and scope, timelines, and internal priorities. The evaluation activities are intended to recognize that variation and highlight how Core to College can learn from it.

# Executive Summary

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As states enter their third and final year of the Core to College Initiative, a key outcome of the initiative continues to be laying the groundwork for the use of the Common Core State Standards (CCSS)–aligned assessments for college placement purposes. Given that the field and operational testing of the Smarter Balanced Assessment Consortium (Smarter Balanced) and Partnership for Assessment of Readiness for College and Careers (PARCC) assessments is occurring in 2014, states do not currently have sufficient information on the validity of the proficiency scores on these assessments to adopt them for placement purposes right away. It is, however, helpful to understand how states are planning to use the CCSS-related assessments and the variety of ways in which states might consider incorporating them into their placement policies in the future.

Placement into college-level courses—particularly at the community college level—has traditionally been based on the results of standardized test scores alone. However, recent research has shown that standardized tests may not be the most accurate measure for placing students into credit-bearing courses (particularly when used as the sole measure for placement). Researchers have identified the use of *multiple measures* as a way to increase placement accuracy, and have suggested that multiple measures may more comprehensively support (1) the transition from high school to entry-level, credit-bearing college coursework and (2) the incorporation of alternate assessments in the college placement process.

For the purposes of this report, the term *multiple measures* is defined as the use of more than one measure to determine student placement into college-level courses. Common multiple measures include, but are not limited to, additional test scores (beyond a single standardized test score), high school grade point average (GPA), high school grades in specific classes, life experiences, and counselor input and referrals.

## Using Multiple Measures for Placement

Based on our literature review, we identified four main methods that state systems and colleges implement in order to use multiple measures for placement into college-level, credit-bearing courses:

1. Construct a formula that uses a combination of measures for placement.
2. Use measures hierarchically—relying on a primary measure for all students, and using supplementary measures when additional proficiency data are needed.

3. Use more than one measure only when a student's score falls *narrowly* below the placement threshold.
4. Use results of a grade 11 assessment to determine additional grade 12 support for college readiness.

To understand whether and how these multiple-measures strategies are used in the Core to College states, we conducted interviews with the Alignment Directors, and others involved in assessment and placement, in each of the 11 Core to College states. Information from these interviews and reviews of state-specific materials are summarized in state profiles throughout this report. These profiles provide context and information about the states' different strategies for entry-level placement practices, their plans for the new CCSS-aligned assessments, and any examples of the use of multiple measures for placement.

Whether or not states are considering using multiple measures for placement, most Core to College states are looking closely at the numbers of students requiring remedial or developmental education in their colleges and considering options for how best to move more students into credit-bearing courses more quickly with the best chances for success. While the strategies used may differ, many states and institutions are experimenting with alternatives to using a single standardized placement test as the sole measure for placement into college courses.

The catalyst for these new approaches has primarily been the recognition that developmental education has not always provided a sufficient gateway into college-level work for students. As these new approaches unfold, the implementation of the CCSS may also impact how states and institutions address the issue of placement and remediation. With the CCSS-aligned assessments on the horizon, states are looking to learn how well the new tests will be able to predict college readiness. States are also anticipating ways in which they might incorporate the CCSS-aligned assessments into their already-established placement frameworks.

### Observations and Recommendations for Implementing Effective Placement Policies

While there is not yet a great deal of evidence about the outcomes of the various state efforts described in this report, several observations and recommendations have arisen from the states' efforts:

- **Conduct validation studies to determine the efficacy of placement policies.** Whether states are using a single standardized placement test or experimenting with multiple measures, validation studies can be conducted at the state, regional, and/or local levels to provide information on the best predictors of successful placement.
- **Utilize the results of validation studies to determine the cost and efficiency tradeoffs.** Adopting a multiple-measures strategy may require additional responsibilities

for counseling staff, additional data sharing or collection mechanisms, and greater collaboration between K–12 and higher education faculty, all of which come with additional costs. Each state will need to determine whether the improved accuracy of placement, and the possibility of sending fewer students into remedial courses, helps to offset these costs.

- **Share the results of pilot efforts with others within and across states.** There is a need for collective learning about the benefits and challenges of using alternative approaches to placement. States and institutions can learn a great deal from one another by sharing data on student outcomes that result from using different placement approaches. Preliminary results of statewide policy changes in Florida, Massachusetts, and North Carolina may be of particular interest to the Core to College states.
- **Take stock of what is happening during grade 12.** Many states are currently utilizing testing in grade 11 to determine which students may need additional support in order to become college ready prior to finishing high school. To help students become college ready, it will be critical to understand whether schools' grade 12 supports can be closely linked to higher education expectations for incoming students.
- **Ensure that data processes and procedures are in place as part of the implementation of a multiple-measures strategy.** In many open-access institutions, students are not required to submit transcripts for admission. Without good procedures for data sharing in place, it may be difficult to actually use measures involving students' transcripts (e.g., GPA, grades in specific courses) to place students.
- **Consider how the new CCSS-aligned assessments can fit into overall placement policy.** The CCSS-aligned assessments may fit in well with states' efforts to utilize early assessments and grade 12 transition courses, but states must have a plan in place to validate the results of these assessments in order for them to be used accurately and effectively.
- **Address the issue of alignment between K–12 and higher education.** Most effective placement strategies require communication and collaboration between these two segments. This sort of collaboration would involve aligning the expectations that colleges have for incoming students and the content and expectations that high schools have for students in key courses during grades 11 and 12.

The choice to broaden placement policy to include multiple measures beyond a single standardized test score involves tradeoffs, including potential tradeoffs between precision and cost, test validity and face validity, and local policy variation and uniform statewide implementation. However, to make the most informed decisions, states must examine the predictive validity of current placement processes and determine whether those processes are currently providing results that help their students succeed.



# Introduction

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As states enter their third and final year of the Core to College Initiative, a key outcome of the initiative continues to be laying the groundwork for the use of the Common Core State Standards (CCSS)–aligned assessments for college placement purposes. Given that the field and operational testing of the Smarter Balanced Assessment Consortium (Smarter Balanced) and Partnership for Assessment of Readiness for College and Careers (PARCC) assessments is occurring in 2014, states are anticipating the new assessments but do not currently have sufficient information on the validity of the proficiency scores on these assessments to adopt them for placement purposes right away. It is, however, helpful to understand how states are planning to use the CCSS-aligned assessments and the variety of ways in which states might consider incorporating them into their placement policies in the future.

Placement into college-level courses—particularly at the community college level—has traditionally been based on the results of standardized test scores alone. However, recent research has shown that standardized tests may not be the most accurate measure for placing students into credit-bearing courses (particularly when used as the sole measure for placement).

Researchers have identified the use of **multiple measures** as a way to increase placement accuracy, and have suggested that multiple measures may more comprehensively support (1) the transition from high school to entry-level, credit-bearing college coursework and (2) the incorporation of alternate assessments in the college placement process.



## Defining Multiple Measures

For the purposes of this report, the term *multiple measures* is defined as the use of more than one measure to determine student placement into college-level courses. Common multiple measures include, but are not limited to, additional test scores (beyond a single standardized test score), high school grade point average (GPA), high school grades in specific classes, life experiences, and counselor input and referrals.

As states across the country consider how to move toward adoption of the CCSS-aligned assessments for placement purposes, Core to College states are well positioned to share their current placement strategies with a broader audience and also to learn from one another about whether and how the concept of multiple measures is currently used. We recognize that certain states may not be considering using multiple measures as a placement strategy. The summaries provided in this report are intended to spur conversation among the Core to College member states and to provide a catalyst for discussion about how and whether an approach that uses multiple measures

might improve upon current placement results and lay the groundwork for the future incorporation of the CCSS-aligned assessments into the placement process.

## Methodology

This report builds on the March 2013 Core to College evaluation report *Placing College Students in Courses for Credit* (Austin et al.), which looked more broadly at the Core to College states' college placement policies and practices. One year later, the evaluation team asked state leadership to revisit their planning for the incorporation of the Smarter Balanced and PARCC assessments, and, specifically, to reflect on whether new placement policies using multiple or alternative measures may be useful.

For this evaluation cycle, the evaluation team interviewed each state's Alignment Director, asking general questions about preparation for the use of CCSS-aligned assessments and specific questions about the use of multiple measures for placement. In most cases, Alignment Directors included colleagues who work in their states' education assessment and placement divisions in these interviews, and these colleagues provided useful, timely information. These initial interviews were intended to provide an environmental scan of the 11 Core to College states with regard to the use of multiple measures. In states where there were examples of multiple measures either currently in use or under discussion, additional interviews were conducted and documents were reviewed to provide a more in-depth look at the various approaches being used or considered.

These interviews and subsequent analyses provide rich context and information about the states' different strategies for entry-level placement practices, their plans for the new CCSS-aligned assessments, and any examples of the use of multiple measures for placement.

The report begins with a literature review that defines multiple measures and summarizes recent research on the logistics, benefits, and challenges of using multiple measures for student placement. In addition, the literature review categorizes the primary ways in which

## Driving Questions

What are current plans in Core to College states for the transition to the new CCSS-aligned assessments?

Do states or their higher education institutions currently use multiple measures for placement purposes? If so, what measures are typically used? What—if any—evidence does the state or institution have or plan to collect regarding whether using multiple measures improves placement results compared to using a single standardized test for placement?

Has there been any discussion about using multiple measures as part of a statewide strategy as the state considers how to incorporate the CCSS-aligned assessments for placement?

multiple measures are currently in use, and highlights a few specific examples of how states and institutions are utilizing these different approaches.

Next, the report presents profiles of seven Core to College states that are currently implementing, or planning to implement, multiple measures and/or other alternative placement measures at the local and/or state level. The report concludes with key observations and takeaways for states as they consider using multiple measures for placement in the near future. Summaries of placement policies of the Core to College states that are not currently utilizing multiple measures for placement are included in Appendix A.

# Literature Review

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Selective postsecondary institutions often use a combination of measures when making admissions decisions. However, open-access institutions do not have that sort of threshold for admission. Accordingly, they must rely on various measures—often just a single placement test—to balance their open-access status with agreed-upon placement standards for eligibility for credit-bearing coursework. As a result, a large proportion of students enrolling in open-access institutions are identified as unprepared for entry-level courses and are consequently placed into remedial (also known as developmental) courses in mathematics, reading, and/or writing.

According to data from the U.S. Department of Education’s 2009 Beginning Postsecondary Students Longitudinal Study, about 68 percent of students who began at a public two-year college took one or more remedial courses in the six years after their initial college entry (Scott-Clayton, 2012). In addition, college completion rates are particularly low among students who are required to take remedial coursework; thus, the effectiveness of these courses in helping students complete college is unclear (Dadgar, 2012; Martorell & McFarlin, 2011; Scott-Clayton & Rodriguez, 2012; Xu, in press). As a result, policymakers and practitioners have begun questioning not only the value of remedial education, but also the process by which students are assessed and placed into remedial courses.

## Current Placement Landscape

Currently, 92 percent of two-year institutions administer high-stakes exams to determine whether a student is eligible to enroll in college-level courses or is referred to one or more levels of remedial education (Hughes & Scott-Clayton, 2011). Sixty-two percent of community colleges use the ACCUPLACER assessment, developed by the College Board, while 46 percent use the COMPASS assessment, developed by ACT, Inc. (Scott-Clayton, 2012).<sup>1</sup> Standardized tests are used in part because they are relatively inexpensive to purchase and require little time to administer and score. In addition, the tests are a consistent measure that can easily be compared across students (Jaggars & Hodara, in press). The new CCSS-aligned assessments are intended to be used as indicators of college readiness, potentially taking the place of current standardized placement tests (Burdman, 2012).

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<sup>1</sup> Some colleges use a combination of the ACCUPLACER and COMPASS assessments.

While most colleges use standardized assessments, independent research has shown that, compared with other measures (such as high school GPA), these tests are not the most accurate measure for identifying whether students are ready for college-level coursework. Studies have shown that the ACCUPLACER and COMPASS tests have high rates of “severe error,” such as remedial placement for a student who would have earned a B or higher in a college-level course (Belfield & Crosta, 2012; Scott-Clayton, 2012). In fact, the developers of ACCUPLACER and COMPASS do not recommend using these tests as the only measure for making placement decisions, but instead recommend using them in conjunction with other indicators of college readiness (Scott-Clayton, 2012).

### Using Multiple Measures to Increase Placement Accuracy

Concerns about the accuracy of standardized tests for placement and the effectiveness of remedial education have led several states and institutions to propose changes to the way in which open-access institutions assess students for college readiness. Among the most prominent proposed reforms is the use of multiple measures in the placement process. *Multiple measures* refers to the use of more than one indicator of college readiness to determine student placement into college-level coursework. Based on a scan of the literature, the most commonly used multiple measures are a combination of high school grade point average (GPA) and standardized placement tests. Other measures include counselor recommendations, student self-placement, grades in high school English and mathematics courses, essay exams, and high school state assessments (Hodara, Jaggars, & Karp, 2012; Hughes & Scott-Clayton, 2011; Bostian, 2012).<sup>2</sup> In addition, some state systems and colleges are considering including performance in a specifically aligned grade 12 course (called a *transition course*) as an indicator of college readiness.

Research shows that using more than one indicator for placement increases accuracy. For example, even though using high school GPA as the sole measure for placement has been shown to decrease “severe error” in placement by 10 to 30 percent, the use of a combination of high school GPA and standardized placement tests yields a higher predictive validity compared with the use of any one measure alone (Belfield & Crosta, 2012; Scott-Clayton, 2012). According to Scott-Clayton’s study (2012), utilizing multiple measures, including high school GPA and placement test scores, in placement decisions could reduce the remediation rate by 8 to 12 percentage points, while maintaining or increasing success rates in college-level courses.

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<sup>2</sup> According to the League for Innovation in the Community College (Bostian, 2012), GPA itself is considered a multiple measure because students earn a high GPA by exhibiting superior learning habits, having strong content knowledge, and maintaining high academic standards and expectations, as demonstrated across varied tests and assignments.

One reason that multiple measures are better predictors of college success may be that college success depends on a variety of cognitive and non-cognitive attributes, and any one single measure is unlikely to provide a complete assessment of all of those attributes (Conley, 2010; Hughes & Scott-Clayton, 2011). While much research has been conducted on predicting success in college-level courses at community colleges, there are also results of research conducted in four-year institutions that indicate GPA and grades in specific high school courses are better predictors of overall success at four-year colleges than standardized tests such as the SAT (Geiser & Santelices, 2007; Hiss & Franks, 2014).

### Implementing Multiple Measures

Nationally, the use of multiple measures for placement has been proposed, and in some cases already implemented, in some state higher education systems and, at the local level, at several individual colleges. For example, California currently has state-level implementation of multiple measures, prompted by the state's 1991 settlement of a civil-rights lawsuit filed by the Mexican American Legal Defense and Educational Fund. The lawsuit argued that using only a single standardized assessment for placement disserves students from diverse racial groups. Consequently, California mandated that its community colleges use more than a single test score for placement. Survey results have shown that the state's community colleges use different methods to implement this multiple-measures requirement: More than one-third use factors such as students' self-reported experience in the subject, students' self-reported high school grades, and other relevant experiences, in an algorithm combining these factors with test scores, to determine placement. Some other colleges consider using additional measures only when students challenge their placement test results (Venezia, Bracco, & Nodine, 2010).

Preliminary results from an evaluation of two community colleges in Los Angeles found that use of multiple measures had increased students' access to college-level courses without compromising those students' success in those courses (Ngo, Kwon, Melguizo, Bos, & Prather, 2013). At Long Beach Community College (LBCC), institutional research indicated that use of transcript data led to more accurate placement results than use of standardized tests, resulting in an initiative to use a combination of high school transcript information and standardized test scores for placement. A year after implementing the initiative, the college believes that it can substantially increase the number of students allowed to take college-level courses without compromising course success rates (J. Hetts, LBCC Director of Institutional Research, personal communication, December 18, 2013).

In Wisconsin, which has a centralized placement system, one two-year college offers students a choice between placement based on the statewide standardized placement test results and placement that combines a rich array of measures, including a writing sample,

ACT scores, high school grades, high school class rank, and TRIO<sup>3</sup> eligibility. Interviews with faculty at the college revealed overwhelmingly positive perceptions of the new placement process. In addition, the college's institutional research department has found that the students who were placed using multiple measures were more likely to succeed in those courses than those placed using only the standardized test scores (Hodara et al., 2012).

#### Four Main Methods of Using Multiple Measures

Based on this literature review, we have identified four main methods that state systems and colleges implement in order to use multiple measures for placement into college-level credit-bearing courses:

- 1. Construct a formula that uses a combination of measures for placement.** In this model, each measure could be weighted equally or differently, according to the importance that the state or institution would place on each specific measure.
- 2. Use measures hierarchically**—relying on a primary measure for all students, and using supplementary measures when additional proficiency data are needed. For example, a state or institution might first consider students' high school GPA, and then only use placement testing for students who are below a certain threshold. This method is similar to receiving a waiver from placement testing. Alternatively, all students could be assessed using standardized placement tests, but high school transcripts would be considered for students who score below a specific threshold or cut score.
- 3. Use more than one measure only when a student's score falls *narrowly below the placement threshold*.** This model is based on the recognition that the greatest placement errors are likely to happen for students who fall closest to the cut-score threshold on standardized tests. Therefore, one or more additional measures would be used to augment placement decisions for students who score very close to the placement cut scores. Unlike in the previous model, additional placement measures would only be implemented if the student narrowly misses the placement threshold, as opposed to using additional measures for all students who fall anywhere below the placement threshold. For example, for students who narrowly miss the placement cut score on the ACCUPLACER assessment, college counselors could review high school transcripts and use a combination of the ACCUPLACER score and the student's GPA to more accurately determine placement.
- 4. Use results of a grade 11 assessment to determine additional grade 12 support for college readiness.** In recent years, several states and colleges have started to work

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<sup>3</sup> The Federal TRIO Programs provide outreach and student-service programs designed to identify and provide services for individuals from disadvantaged backgrounds.

with high schools on early assessment of students, using standardized placement tests or customized early assessments built by higher education institutions (such as the Early Assessment Program developed by the California State University system) to identify students in need of remediation prior to grade 12 (Barnett, Fay, Bork, & Weiss, 2013). The identified students are then offered relevant remedial curricula during grade 12, during which there are multiple opportunities to measure their college readiness through course performance and a standardized post-test.<sup>4</sup> The combination of early assessment, early intervention, and multiple opportunities for students to demonstrate college readiness through course performance can reduce remedial placement rates at the time of college enrollment.

Traditional placement exams have provided low-cost and efficient assessment and placement processes, with a high degree of comparability among different students. However, recent research has called into question the accuracy of using these tests as the sole measure for placement into college-level courses. In particular, research has shown that many students who would have performed well in college-level courses are incorrectly assigned to remedial courses, increasing their time in college and decreasing the likelihood that they will graduate on time (Booth, Willett, Hetts, & Taylor, 2012; Scott-Clayton, 2012; Scott-Clayton & Rodriguez, 2012). Many researchers and policymakers have recently argued that when the cost of inaccurate placement is taken into account, standardized placements can no longer be considered an efficient method to assess and place students (Jaggars & Hodara, in press; Bostian, 2012). Consequently, some state postsecondary systems, as well as individual colleges, have been proposing and implementing alternate processes for assessment and placement—often using multiple measures—with the goal of increasing placement accuracy and reducing the number of students assigned to remediation.

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<sup>4</sup> These courses are often referred to as *transition curricula*. Transition curricula are courses (or a set of modules, online tutorials, or other educational experiences) that are offered no later than grade 12 to students who are at risk of being placed into remedial mathematics, reading, or writing when they enter college. The goals of these initiatives are to avoid students' placement into remedial courses and to prepare students to succeed in their first credit-bearing English and mathematics college courses (Barger, Murray, & Smith, 2011).



# Cross-State Overview

Based on our analysis of national research as well as state-specific data, many states across the country have begun to express concerns about the number of students requiring remedial education and about the low college completion rates of those students.

Increasingly, states and institutions are considering ways to increase the numbers of students going directly into credit-bearing courses, reducing or eliminating the need for time spent in developmental education. Placement strategies in the Core to College states range from the traditional use of a single placement test and standard cut score to alternative approaches using multiple measures. Several states also have tentative plans to integrate the new CCSS-aligned assessments into their placement strategies.

In our conversations with Alignment Directors, we asked specifically about the different measures used for placement into college-level courses. While standardized tests are the most common measure used in the Core to College states, several states are experimenting with or implementing other measures as well. Overall, we identified six major categories of measures being used for placement into college-level courses, which are outlined in the pie-chart figure below. Each state uses a slightly different combination of these measures. In each of the state profiles in this report, we use a similar figure to highlight the measure(s) used for placement in that particular state.



The Core to College states consider the placement measures above in different combinations; the general strategies are described in the following sections. These descriptions of placement strategies are for illustrative purposes only, and several states utilize more than one strategy. Many of the multiple-measures efforts described are in the pilot or early implementation phase, or, in some cases, still under discussion and development. However, the range of approaches across the Core to College states provides some interesting contrasting examples for states to consider as they move forward in trying to determine the most appropriate placement policies for their students.

### Use of a Single Placement Test

Several states continue to follow the more traditional placement policy of using a single standardized test (or one of several approved test options) for placement, with statewide cut scores for placement into credit-bearing courses. This approach is intended to provide consistency in determining college readiness across institutions throughout a state. Advocates of this approach argue that a single placement test provides a much more objective measure of college readiness than a measure such as GPA, because there can be a great deal of variability in high school course grading standards. For several of these states, the CCSS-aligned assessments may become another option in the menu of standardized tests that can be used to determine placement.

Indiana, Kentucky, Louisiana, and Oregon are four of the Core to College states that are primarily using results from a single standardized test to determine placement into credit-bearing courses. In some cases, like Louisiana and Kentucky, tests and cut scores are determined by state policy. In Oregon, these decisions are made locally by individual colleges. In Indiana, there have been some discussions about the possibility of using portfolios of student work in placement decisions, but, to date, the standardized placement test is still the preferred mechanism for placement. While there is a general wariness in these states, based on the perceived lack of objectivity of GPA as a placement measure, leadership in some states (such as Kentucky) acknowledge that current placement practices may not be fully benefiting students. As a result, some of these states are looking at models such as college co-requisite courses to get certain students into credit-bearing courses more quickly.

### Use of Multiple Measures

While the Core to College states all use standardized testing for placement to some extent, some states are either experimenting with or moving toward using multiple measures for placement. In most cases, the use of multiple measures is in the very early stages—either going through focused piloting or in preliminary planning and implementation—and are in need of data and validation studies to determine their efficacy. The four main methods of using multiple measures, outlined in the literature-review section, provide a framework to categorize the different multiple-measures approaches seen across the Core to College states. It is important to note that the categories are not necessarily mutually exclusive—states may be experimenting with more than one method or may be using aspects of several methods. Because each state has its own unique approach, this report provides more complete descriptions and details of each Core to College state’s placement strategies in the seven state profiles and in Appendix A.

**1. Construct a formula that uses a combination of measures for placement.** In its purest sense, this may be what most people think of as *multiple measures*—the use of a combination of measures to determine placement. However, this approach can take many

different forms. Colorado, Florida, and Hawaii all use some aspect of this model, but in very different ways. In Colorado, a new assessment that will include factors such as life experiences and non-cognitive skills, to provide additional indicators of college readiness, is being developed. In Florida, a new policy exempts most graduates of state high schools from placement testing and allows them to enroll directly in college-level courses. For those who are not exempt, life skills and other non-cognitive indicators are taken into consideration—a unique example of the use of multiple measures for non-traditional students. In Hawaii, pilot testing for college mathematics placement uses a combination of students' GPAs and their Algebra 2 course grades to determine placement into college-level mathematics courses.

**2. Use measures hierarchically**—relying on a primary measure for all students, and using supplementary measures when additional proficiency data are needed. Florida, Massachusetts, North Carolina, and Washington are states that demonstrate this hierarchical model, but each takes a slightly different approach. In Florida, for those graduates of state high schools who are not exempt from placement testing, additional measures (including tests) are taken into consideration for placement. Massachusetts and North Carolina also have new policies using a hierarchical approach that looks first at high school GPA to determine placement, then at additional measures (including test scores) if a threshold GPA is not met. In Washington, several community colleges are experimenting with the use of this hierarchical approach. If students at these colleges challenge their placement (which is initially based solely on their standardized test scores), then their grades in specific high school courses can be used as supplementary measures for placement purposes.

**3. Use more than one measure only when a student's score falls *narrowly* below the placement threshold.** When cut scores are assigned to tests, there are always some students who fall just below the placement threshold. For some students, one wrong answer could be the difference between placement into a developmental course and placement into a credit-bearing course. None of the Core to College states fit this model exactly, but Kentucky is looking at a possible co-requisite model: rather than being assigned to developmental education, a student whose score falls narrowly below the threshold would be allowed to take a credit-bearing course along with a co-requisite support course. In Washington, when students who fall narrowly below the threshold challenge their placement results, additional measures can be used to determine their placement.

**4. Use results of a grade 11 assessment to determine additional grade 12 support for college readiness.** On the surface, this approach may not seem to be an example of a multiple-measures strategy, but this multi-step approach actually exemplifies the underlying concept of using multiple measures for placement. This approach uses a combination of early assessment and targeted grade 12 remedial curricula. If students successfully complete the grade 12 transition course(s), they are guaranteed direct placement—without additional testing requirements—into credit-bearing, college-level coursework. This is an increasingly popular approach (and one that fits nicely with states' preparation for the CCSS-

aligned assessments) as states try to figure out how best to get more students ready for college-level courses more quickly. In Tennessee, an extensive pilot program that uses this approach is underway in mathematics, providing the equivalent of a college developmental mathematics course in the high-touch environment of the high school. In Florida, college readiness assessments and transition courses leading to college-level placement have been in place for several years. Washington is also making plans to use this approach as it prepares to adopt the Smarter Balanced assessments, and Indiana is piloting the Southern Regional Education Board transition courses using this approach.

The choice of placement strategies depends in part on the context of the given state and where states or institutions see the largest need for improvement in their current practice. For those most concerned with consistency and standardization across the board, continued reliance on standardized tests is typically most appealing. Others are considering alternative measures because they believe that current standardized tests either are under-placing students or are not good predictors of success in college courses. As the following state profiles show, the state education policy landscape is changing rapidly, and recent policy changes in some states will provide interesting lessons for other states and institutions that might be considering major alterations to their placement policies.

# State Profiles: Using Multiple Measures for Placement Decisions

The use of multiple measures for placement into credit-bearing courses is fairly new for many of the Core to College states. Traditional placement methods (e.g., a single standardized test) are still the primary approach to placement decisions. However, in several cases, at either the state or institutional level, or both, pilot studies are underway to investigate alternative approaches for placing students into entry-level, credit-bearing courses.

Following are seven profiles of Core to College states that have begun to implement multiple measures for placement, and/or other alternative placement strategies, either locally or statewide. The profiles provide details about the different strategies that these states are using and some of the key challenges that states and institutions face as they move toward using multiple or alternative measures. Summaries of the four Core to College states that are not currently using or experimenting with multiple measures are included in Appendix A.



**Colorado's** master plan for higher education, Colorado Competes, is designed to improve the effectiveness of remedial education, increase student persistence, and raise college completion rates. As a part of this initiative, in December 2013, Colorado adopted new admissions standards and remedial education policies, with requirements for college readiness assessments, including both primary and secondary evaluations. The primary evaluation serves to flag whether a student is college ready in English and mathematics and if the student will need support or reassessment. For the primary evaluation, there are specific cut scores for ACT, SAT, and COMPASS, and placeholder benchmarks are provided

for ACCUPLACER and the PARCC and Smarter Balanced assessments, while the Commission on Higher Education awaits the results of additional analyses (including the results of national and local field tests of the PARCC and Smarter Balanced assessments). Colorado community colleges are open enrollment, whereas four-year institutions have admissions requirements but may still admit students who score below the cut score. The secondary evaluation is institution-specific and used to place students into courses after admission, if the primary assessment indicated that the student is not college ready in one or more areas. The policy allows for institutional flexibility in determining the secondary evaluation. Typically, incoming community college students take ACCUPLACER for placement if they do not have an ACT or SAT score that meets the cut score. Prior to the new policy, this practice of requiring both a primary assessment and a secondary evaluation was already a standard practice for Colorado's four-year institutions.

In addition, the policy indicates that any institution, with approval, can offer credit-bearing Supplemental Academic Instruction (SAI) as a co-requisite to a college-level English or mathematics course, in order to support students' success. The secondary evaluation indicates whether students must take a remedial course, must enroll in a college-level course along with SAI, or can enroll directly into a college-level course without SAI. Only three Colorado institutions are currently authorized to provide SAI, but other institutions can apply to develop these courses, which, when approved, makes the institutions eligible for federal aid.

### **Redesigning the Developmental Education Program**

The Colorado Community College System, comprising 13 institutions, is currently undergoing a redesign of its developmental education program. In Colorado, as in many other states, a number of students who start developmental courses fail to complete a college degree. The goal of the program and curricular redesign is to “accelerate students by reducing the amount of time, number of developmental credits, and number of courses in the developmental sequence so students can be successful in a college-level course” (Colorado Community College System, 2013).

A cross-institution remedial education task force spent 18 months studying approaches in other states as well as exemplar programs within the state. After determining that no single model from another state would work in Colorado, the task force identified four key strategies to meet the needs of students in developmental courses: acceleration, contextualization, mainstreaming, and pathways.

In February 2013, the task force developed a new, compressed, and accelerated set of common developmental education courses in English and mathematics that were reverse designed based on what students need to know on their first day of a credit-bearing course. The aim is to get students into 100-level (entry-level) classes no later than their second term of college enrollment. To date, 60 percent of community colleges have implemented the

common courses. The policy mandates that, by fall 2014, only the new common courses can be offered for developmental education. Common course numbering—in which the same course numbers are used across all colleges within the Colorado Community College System—has eased the transition to this systemwide policy.

A team from Rutgers University is conducting an evaluation of the redesigned program, including tracking students' successful completion of gateway courses and student persistence over time. Rutgers is also developing a systemwide data plan so that Colorado can continue to gather data and evaluate the success of the program against previous data.

### **Developing a New Assessment for Placement Decisions**

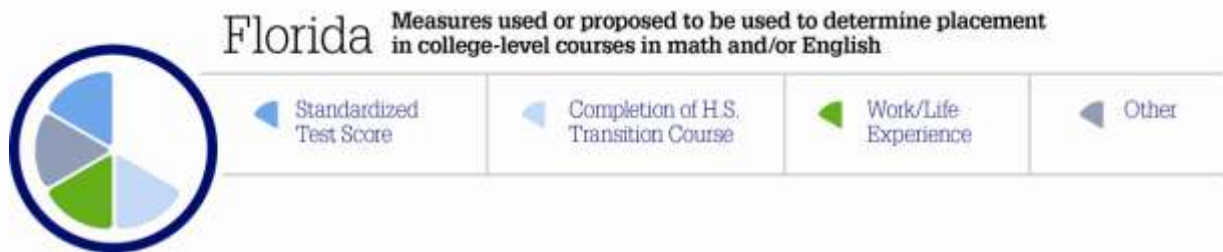
The Colorado Community College System is also in the early stages of implementing a new assessment that will use a range of measures. Anecdotal evidence from faculty had suggested that ACCUPLACER results led to students being over-placed into remedial courses. To address this issue, the Colorado Community College System is currently identifying a vendor to develop an assessment, to be used for placement decisions, that can more accurately measure students' current readiness for college. The new assessment will capture a range of information, including students' non-cognitive skills (e.g. study skills, persistence, test taking), and will also include benchmarking questions related to the newly redesigned course sequence. For example, English benchmarking questions will measure how well students can write an essay, write an argumentative response, or read a complex text. Mathematics benchmarking questions will be based on three mathematics pathways (i.e., applied mathematics, statistics, and algebra). When validation studies are available for the PARCC and Smarter Balanced assessments, the newly designed placement test may also take scores from those assessments into account.

Additional sources of information that cannot be directly included in the new assessment may also be used to supplement the measures when making placement recommendations using this planned holistic approach. For instance, demographic information and students' career plans will be discussed during advising and will be available through an electronic database that includes data on students' current life circumstances (e.g., most recent schooling, work outside of the home, number of work hours, dependent children) and on their intended career pathways (informed by Colorado students' Individual Career and Academic Plan learning plans/portfolios).

According to the Community College Coordinator of Developmental Education, Bitsy Cohn, the goal of this redesigned assessment is to gather "enough information for a more informed decision" and to develop an assessment that gets students into a gateway toward credit-bearing, non-remedial courses more quickly. Although the use of GPA for placement has been discussed, the growing number of non-traditional students limits its value as a measure for all students. The plan is for the new assessment to be fully implemented in fall 2015.

Even though the new assessment is still in development, several implementation challenges are already anticipated. Institutions and faculty want a more robust and accurate measure of students' college readiness, but do not want a larger time commitment or per-student cost than the old test involved. It will be up to individual colleges to determine how to budget for the new assessment. In addition, student advisors typically have large student loads and sometimes have only 15 minutes per student consultation. Cohn says that advisory systems will need to rethink how to use their limited time to take into account more complex student profiles.

In addition, the new approach to “just-in-time remedial education” puts more weight on co-requisite courses linked to credit-bearing courses. This represents a significant culture shift that makes some faculty nervous. “Compressing and pushing faster is frightening for a lot of people,” says Cohn. Faculty-to-faculty training can begin to address some of these issues. The hope is that narrowing the gap between high school and credit-bearing courses will improve students' success rates in college.



In **Florida**, preparation for the use of multiple measures is shaped in large part by a significant legislative overhaul of developmental education, signed into law in 2013. This legislation, SB 1720, has major implications for the Florida College System's 28 colleges,<sup>5</sup> and its implementation will be closely watched throughout the country. The primary intent of the legislation is to “reinvent developmental education,” which requires a “fundamental shift in the culture that seeks to directly enroll many more students in college level coursework” (Florida College System, 2014).

### Placement Test Exemptions

One of the major changes resulting from this new legislation is the provision for exemptions from taking the common placement test and from subsequent referral to developmental education. Beginning in the spring of 2014, any student who entered grade 9 in a Florida public school in 2003/04, or any academic year thereafter, and earned a Florida high school

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<sup>5</sup> The Florida College System is made up of 28 institutions, including community colleges and state colleges. This system is separate from the state's university system.



diploma will not be required to take the common placement test or enroll in developmental education. Any student serving as an active-duty member of any branch of the United States Armed Forces will receive this same exemption. Exempt students may elect to take the placement test and to enroll in developmental education, but they are not required to do so.

***New student achievement measures.*** In addition to these exemptions, the legislation also allows for flexibility, at the local level, for colleges to designate various measures (in addition to common placement test scores), known as *student achievements*, that may be included in advising students about their developmental education options. These student achievements may include GPA, work history, military experience, participation in juried competitions, career interests, and/or degree major declaration. For students who are exempt from placement testing, an advisor might consider these achievements in recommending that a student take a placement test even though the student is not required to do so.

A student who is not exempt from the placement test and who scores below the cut score may still be able to directly enroll into credit-bearing courses if an advisor deems that the information provided by a combination of the student achievements (or by additional measures identified by the college) indicates that the student should be placed into credit-bearing coursework. Therefore, multiple measures can be used to help place students into credit-bearing courses when placement test scores alone would not give students that option, as well as to advise students who are exempt and eligible to take college-level courses that they might benefit from taking the placement test to determine if developmental support is necessary. In addition, these provisions allow for greater consideration of multiple measures for non-traditional or adult students than is often seen in other states.

### **Grade 11 Assessment**

The new legislation builds upon an existing policy that made common placement testing mandatory for Florida's grade 11 students, and required students scoring below the cut score to take transition courses during their senior year of high school to address their specific needs and to get them college ready.<sup>6</sup> According to Julie Alexander (Vice Chancellor for Academic and Student Affairs, Division of Florida Colleges), the expectation is that the Florida Standards-aligned assessments—once adopted, approved, and validated—will be incorporated into this testing of grade 11 students. “Florida has already recognized the high school reading assessment for college placement purposes, so it is not a stretch to assume the same for the new assessments,” Alexander says.

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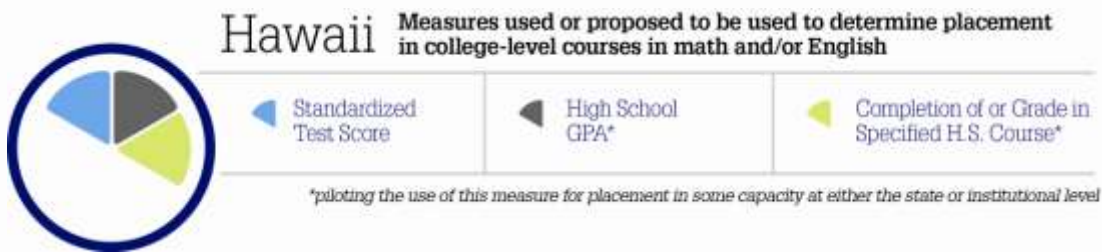
<sup>6</sup> State Board Rule 6A-10.0315 defines the placement assessments that colleges are allowed to use and the placement scores that determine college readiness.

## Implementation Plans

SB 1720 required that each institution in the Florida College System develop an implementation plan, to be submitted to the Chancellor of the system for approval by March 1, 2014. These plans, for implementation beginning in the fall of 2014, must include a comprehensive advising plan; an explanation of the multiple measures that the institution may consider for advising students about placement options; a set of developmental education strategies that will be available, including a description of the costs associated with each option; and provisions for the collection of student success data.

**Advising.** As evidenced by the various requirements for the implementation plan, the move to get more students into credit-bearing college courses impacts much more than assessment and placement. In Florida, the policy changes will have a significant impact on advising at the community college level. All Florida College System institutions must provide individualized admission counseling to all entering, first-time college students. Students who are exempt from placement testing are supposed to be advised that, although they are exempt, they can still take the placement tests to determine whether they might benefit from developmental education. For students who are not exempt from the common placement test, scores should be used to counsel students regarding the various developmental education options available. According to Alexander, early evidence indicates that some students have been receptive to the advisors' guidance and are taking placement tests, even if they are exempt from doing so, to determine where they might benefit from additional support.

**Accountability.** In addition to increased advising requirements, the new legislation comes with increased accountability measures. Beginning in October 2015, each institution in the Florida College System will be required to prepare an accountability report that includes student success data related to each developmental education strategy implemented. Additionally, the Florida Department of Education has already begun its data collection process to capture exemption status and developmental education strategies.



In **Hawaii**, discussions of the use of multiple measures center around two different strategies: transition courses and use of GPA and course grades as placement measures.

### Transition Courses

The state is looking more closely at the use of transition courses during the senior year of high school as a way to move students more smoothly into entry-level, credit-bearing college mathematics courses. In this scenario, students' mathematics mastery would be assessed at the end of grade 11, and the cut score on that test would determine whether or not a student would be required to take a transition course during the senior year of high school.

The ACT will initially be used as this grade 11 assessment, but the state will consider using the Smarter Balanced assessment (once available and validated) as the indicator, or one of the indicators, of whether students should be directed to the transitional course. Gaining student and parent buy-in for this transition course is critical. Karen Lee, Executive Director for Hawaii P–20, states that enrolling in this course during the senior year needs to “guarantee that if you get a passing grade or better, you’ll be automatically placed into college-level courses. It’s got to be worth it to the students and help them get into credit-bearing courses.”

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“[The transition course has] to be worth it to the students and help them get into credit-bearing courses.”

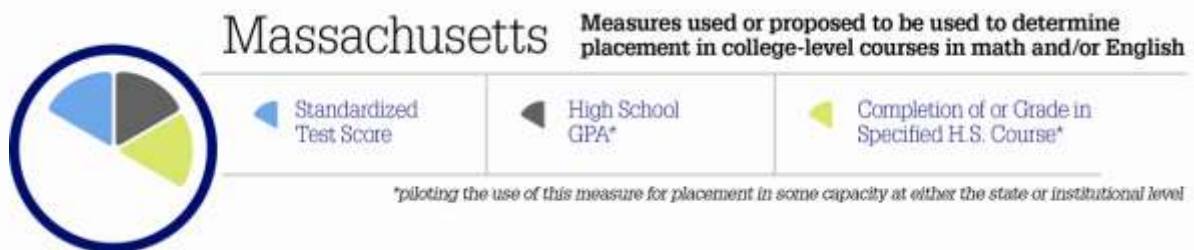
### GPA and Course Grades as Placement Measures

A second example of the use of multiple measures in Hawaii is the state’s experimentation with using GPA and grades in specific courses for placement in mathematics. As part of its participation in Achieve’s American Diploma Project, the state piloted the use of Pearson’s Algebra 2 End-of-Course Exam as a possible placement indicator. As part of this pilot, students who took the End-of-Course Exam, met a specific cut score (determined in consultation with college mathematics faculty) on the exam, and received a B or higher in their high school Algebra 2 course were automatically placed into a college-level mathematics course if they took the exam within 18 months of enrolling in the college mathematics course.

Because of some data-sharing restrictions that prevented an automatic sharing of the End-of-Course Exam score, the number of students who actually used their exam score for placement through this pilot was not large. However, the new placement process itself was a huge accomplishment. According to former Alignment Director April Goodwin, simply getting college faculty on board with automatic placement was “pretty historic” and something that Hawaii had not accomplished previously.

**Evaluating the use of GPA and course grades as placement measures.** Two of Hawaii’s community colleges are currently working on pilot studies, partially prompted by research showing that ACCUPLACER and COMPASS may not be the strongest predictors of success in college-level mathematics. In these pilots, students who achieve at least a 2.6 cumulative GPA and a C or better in their high school Algebra 2 courses will be automatically placed into Math 100, a credit-bearing college mathematics course. Since the pilots began in the spring 2014 semester, no information on student outcomes is currently available.

Since community college students in Hawaii do not have to submit grades or transcripts for admission, data sharing also presents a challenge for these pilot studies. Therefore, the state needs to figure out the best way to help students ensure that their GPAs and Algebra 2 scores are reported for placement consideration. Hawaii P–20 is looking at ways to make sure that these data can be easily shared, and is hoping that eventually, through its College and Career Ready Portal, students will be able to readily access this information.



Assessment and placement policy in **Massachusetts** has gone through some significant changes over the past fifteen years, and recent changes to the policy specifically call for the use of multiple measures. In 1998, the state adopted the Common Assessment Policy of Massachusetts to set the state’s standards for assessment and placement, including the designation of ACCUPLACER as the common placement test. Over the years, however, concerns about the numbers of students being placed into developmental education and the failure of many of those students to go on to complete college-level coursework, led the state to question the assessment and placement process as well as developmental education in general.

The problem is particularly notable in mathematics, where more than three times as many community college students (and five times as many students in the state universities)

require developmental mathematics as require developmental English. Of those students who enroll in developmental coursework, many do not go on to complete a college-level mathematics course. Research has shown that, among students entering Massachusetts colleges in 2010, only 20 percent of students who completed developmental mathematics at the community college level also completed a college-level mathematics course within two years. At the state universities, 56 percent of students who completed developmental mathematics also completed a college-level mathematics course within two years. Disaggregation of the data shows that the percents are even lower for African American, Latino, and low-income students (Vision Project, 2013).

In March of 2012, the Commissioner of Higher Education in Massachusetts designated a Task Force on Transforming Developmental Math Education to “recommend steps to systematically improve the percentage of students that complete developmental math education and pass the first college-level math course required for their program of study” (Vision Project, 2013). One charge of this task force was to review the 1998 Common Assessment Policy and recommend modifications related to the assessment instrument, cut scores, exemptions, and other aspects of assessment. The final report of this task force (Vision Project, 2013) was submitted to the Board in October 2013, and a new assessment policy was approved based on the recommendations included in that report.

### **A Hierarchical Approach to Placement**

The new policy specifically calls for the use of multiple measures—including the use of high school GPA, information on courses taken during high school, and scores on the ACCUPLACER test—in determining appropriate mathematics placement. Placement into college-level mathematics courses can be determined in one of the following ways (Figure 1 provides a visual summary of this placement policy):

- a. Recent high school graduates (and/or those who graduated within the last three years) and whose high school GPA is a 2.70 or higher are exempt from the initial placement exam and should be placed directly into the lowest college-level math course appropriate for their chosen pathway of study; institutions may use a placement exam to determine if a student is prepared for a course more advanced than the gateway course.
- b. Recent high school graduates whose high school GPA is lower than 2.7 but higher than 2.40, and who have successfully passed four math courses including math in their senior year are exempt from the initial placement exam and should be placed directly into the college-level math course appropriate for their chosen pathway of study. Those students with a GPA between 2.4 and 2.7 that don’t meet this criterion will be required to take the placement exam. Institutions may use a placement exam to determine if a student is prepared for a course more advanced than the gateway course. These students will have access to additional academic support if they so desire.

- c. Recent high school graduates whose high school GPA is lower than 2.40 will be required to take the ACCUPLACER exam and its score will determine placement into the math course appropriate for their career pathway.
- d. Students who do not have a high school GPA or whose high school GPA is older than three years will be required to take the ACCUPLACER exam and its score will determine a student's placement into math courses. (Vision Project, 2013)

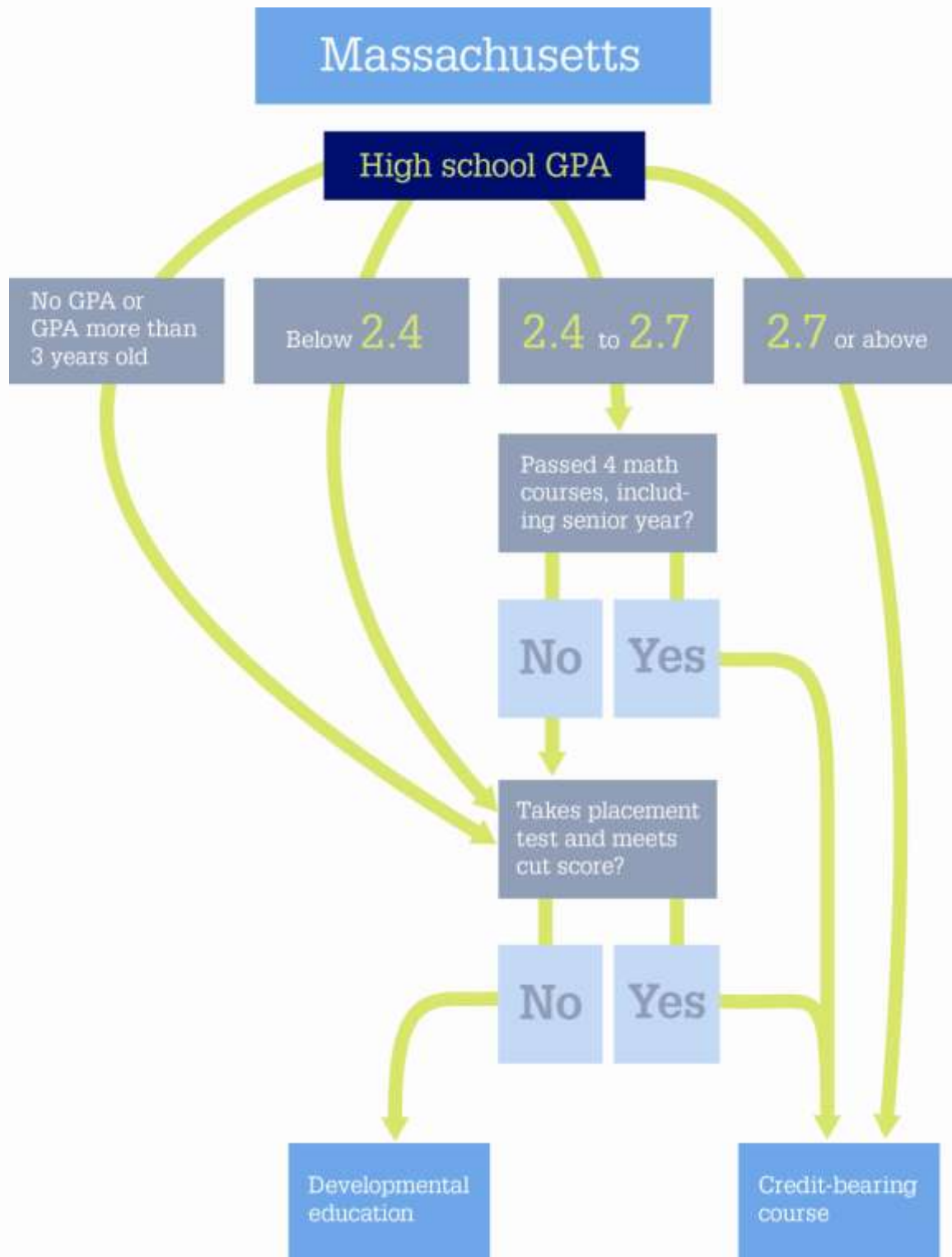
### **Implementing the New Multiple Measures Approach**

The new placement criteria will be piloted during the 2014/15 academic year, allowing institutions to either replace their current placement standards with the new policy's recommendations or introduce pilot projects in conjunction with current placement standards. During 2014/15, the Board of Higher Education and the Department of Higher Education will authorize campuses to allow limited variations in the GPA placement standard as part of the pilot projects. Campuses will report results of the pilots to the Department of Higher Education, and the Board of Higher Education will review the results of these initiatives and modify policies as necessary prior to full implementation in the fall of 2015.

**Implementation teams.** According to Carlos Santiago, the Senior Deputy Commissioner of the Department of Higher Education, the Commissioner of Higher Education has asked each campus to organize an implementation team that includes representatives from admissions, student support services, and mathematics, as well as representatives from other impacted areas. In addition, the Department of Higher Education has an implementation team composed of mathematics experts as well as two advisory members from each campus in the Massachusetts Public Higher Education System. This team will help guide the pilot year of the new placement process, consider how the PARCC assessments will be incorporated into the process, and consider how/if multiple measures for non-high school students might be included.

**Evaluating and refining the placement criteria.** At the campus level, Karin Vorwerk, Chair of the Mathematics Department at Westfield State University, appreciates the leeway provided by the Board of Higher Education for piloting these studies and hopes that this flexibility will continue. Vorwerk notes that, while there is a general consensus among mathematics faculty that moving away from reliance on a single placement test is a good idea, many of her colleagues wonder whether GPA in high school mathematics courses, or even a student's grade in the highest-level high school mathematics course taken, might be a better indicator of proper placement into college mathematics courses than cumulative high school GPA.

Figure 1. Massachusetts' Policy for Placement into Credit-Bearing College Mathematics Courses



Westfield State University is currently conducting its own pilot study to determine possible alternatives to standardized test scores for placement into different levels of credit-bearing mathematics courses. (Westfield does not offer developmental mathematics other than a summer bridge program for urban youth.) The study research is looking at multiple factors—including test scores as well as GPA and grades in high school mathematics courses—to determine the best predictors of student success in college-level mathematics. (Research conducted by Vorwerk in 2004 found overall GPA to be a better predictor of success than placement test scores.)

Vorwerk notes that having data on your own students is important, and that institutional support to collect and analyze these data and then use the results is critical to successful policy change related to placement measures; mathematics faculty realize that a placement test provides a minimal snapshot and that course grades and GPA likely provide more information about important skills such as persistence and problem solving. However, Vorwerk acknowledges that utilizing these different measures can be less efficient and more costly than looking at a single test score, and that all of the various implementation factors need to be considered.

The goal of this new multiple-measures placement policy is that, by 2018, each campus within the system will have 20 percent more students completing their first credit-bearing mathematics course within their first two years of enrollment (using 2009 as the comparison year). According to Santiago, evaluation will be an important component of the policy, and the state will likely be considering an RFP for the development of an appropriate evaluation metric.

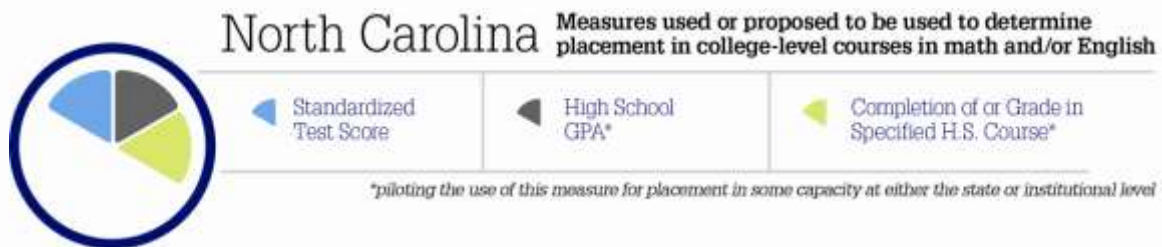
**Implementation logistics.** As is the case in most states, the proposed use of multiple measures for placement in Massachusetts does not only involve changes to the assessment policy; it is also accompanied by proposed changes in other areas. As part of the new policy approved by the Board of Higher Education, institutions of higher education will also be required to revise the content, sequencing, and time frame of developmental education, and to clearly identify academic pathways and require students to select a pathway early in their academic careers. Colleges will also be required to align mathematics courses to individual pathways, so that students are directed to mathematics curricula that are most appropriate to their selected field of study.

The Department of Higher Education also pledges to provide support for the implementation of these recommendations. This support will include actions such as seeking additional funding, strengthening data systems, improving communication and interaction between K–12 and higher education to support improved course alignment and more clearly understood expectations of college readiness, and supporting professional development.

Since this policy was adopted in fall 2013, there have been discussions about how the policy could change once the CCSS-aligned assessments are available. The state's current plan is



that once the PARCC assessments are in place and validated, they will be the primary measure used for placement into college courses, and GPA and other measures will be used only if a student's PARCC score is below a certain threshold. Prior to adopting such a policy change, the state expects to review data on the success of students in college-level mathematics courses based on their PARCC scores.



Using multiple measures for placement is one of the policy changes that arose from **North Carolina's** comprehensive Developmental Education Initiative, which was established in 2009 by Scott Ralls, President of the North Carolina Community College System (NCCCS). This initiative created statewide policy teams to focus on implementing strategies to increase the number of students enrolling in and successfully completing college-level courses. In addition to considering changes to assessment and placement, the policy teams focused on redesigning the developmental education curriculum, creating accelerated developmental education modules, and working with the K–12 sector on curricular alignment.

As of 2009, NCCCS colleges were mainly using a combination of the COMPASS and ACCUPLACER tests for student placement,<sup>7</sup> and community college leaders at the state level were concerned that (1) a majority of students who enrolled in NCCCS were being placed into remediation; (2) remediation was costly; and (3) national research conducted by the Community College Research Center (CCRC) had shown that students who had been assigned to significant amounts of remediation were very unlikely to complete their remedial sequence and enroll in a credit-bearing course (Morrissey & Liston, 2012).

### Using Research to Inform Decisions on Placement Measures

In 2011, the Developmental Education Initiative State Policy Team's Assessment and Placement Committee contracted with CCRC to research whether there were better alternatives for placement measures than the ACCUPLACER and COMPASS tests. Specifically, the research was to consider the value of using high school transcript data for college placement. The CCRC researchers matched the college transcripts of about 20,000 NCCCS students with these students' high school transcripts, and found that high school

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<sup>7</sup> Some colleges were also using the ASSET test for placement.

GPA was a better predictor of success in college-level courses than the standardized assessments used by NCCCS (Morrissey & Liston, 2012). According to Cynthia Liston, NCCCS Associate Vice President for Policy Research and Special Projects, many at the state and college levels were astonished by the research finding that approximately one-third of students were severely misplaced and that using high school GPA for placement would cut in half the number of students who were misplaced.

**Importance of state and local data.** Following the release of the research, a statewide working group facilitated multiple opportunities for discussions among college leaders and faculty and the CCRC researchers. For example, colleges were interested in understanding the link between high school GPA and college course performance for each high school district in order to better understand that link for their particular feeder high schools. CCRC conducted the analysis and the research showed that for almost all high schools, a student's high school GPA was highly predictive of his or her college GPA.

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“It was essential that this was research based on our [state’s] own data . . . These were our students . . . and it was hard to argue with our own data.”

Liston concurs that having this research on data specific to North Carolina was vital in gaining support for the placement reform. She says, “It was essential that this was research based on our own data, and not from another state. These were our students . . . and it was hard to argue with our own data.” John Denning, North Carolina’s Alignment Director, echoed that sentiment, noting that both having the data from CCRC and communicating the findings to faculty proved key in gaining support for change. He states, “It requires good data to demonstrate what you’ve always done isn’t working effectively; it also requires a lot of communication with the faculty.”

As a result of this research, in February 2013, the North Carolina State Board of Community Colleges approved the Multiple Measures for Placement Policy. This policy calls for the use of “multiple measures for placement using high school transcript GPA and/or standardized test scores,” establishing a hierarchy of measures for colleges to use to determine recent high school graduates’ readiness for college-level courses (Morrissey & Liston, 2012). NCCCS colleges could opt to begin implementing this policy as early as fall 2013; every college will be required to implement the policy by the fall semester of 2015.

### **North Carolina’s Multiple Measures for Placement Policy**

The multiple measures policy only applies to students who have taken four mathematics classes, including one class beyond Algebra 2. A memorandum to college presidents written by Dr. Sharon Morrissey, NCCCS Executive Vice President, describes the policy as follows (Figure 2 provides a visual summary of this placement policy):

The Multiple Measures for Placement Policy establishes a hierarchy of measures that colleges will use to determine students' readiness for college-level courses:

- (1) A recent high school graduate who meets the specified GPA benchmark (an unweighted high school GPA of 2.6) will be exempt from diagnostic placement testing and will be considered "college-ready" for gateway math and English courses.
- (2) If a recent high school graduate does not meet the GPA benchmark, the college will use specified ACT or SAT subject area test scores to determine placement.
- (3) If a recent (graduated within 5 years) high school graduate does not meet the GPA threshold or have college-ready ACT or SAT scores, the college will administer a diagnostic placement test (to be developed by the College Board by May of 2014) to determine placement.
- (4) If an applicant does not have a recent high school transcript or ACT or SAT scores, the college will administer the diagnostic placement test to determine placement. (Morrissey, 2013)

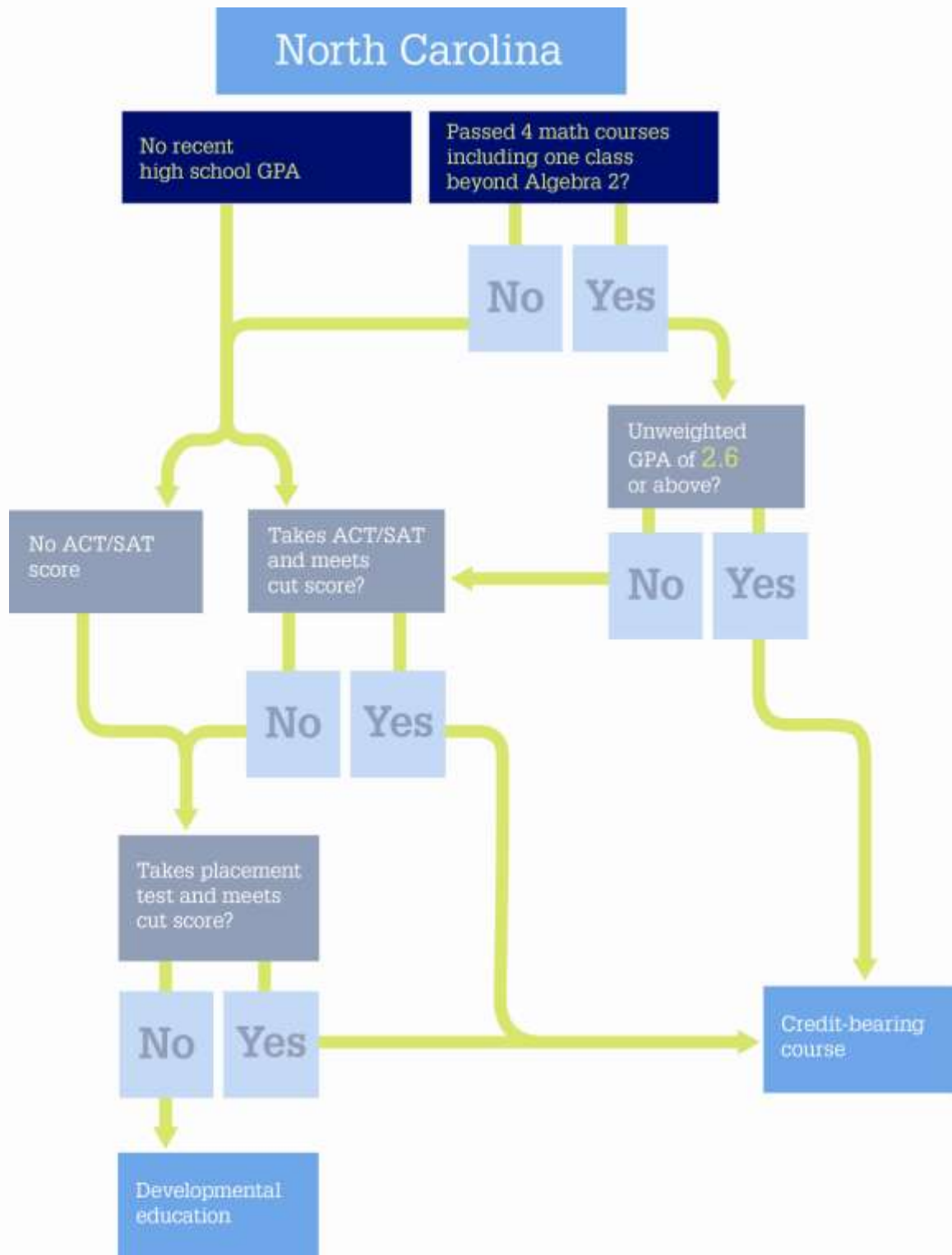
### **Implementing the Multiple Measures for Placement Policy**

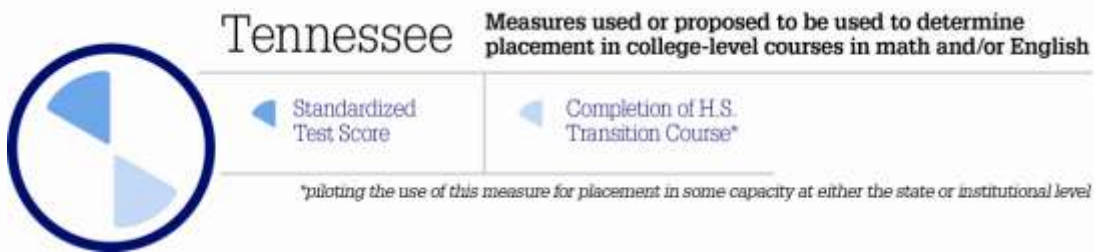
Pending approval of the state's community college board, the colleges may be given some discretion in implementing this policy. For example, even though a GPA of 2.6 qualifies any student for college-level mathematics courses, colleges may establish local policies to require a supplemental mathematics lab as a co-requisite for some students. Although Liston notes that some of the details regarding colleges' discretion in applying the details of the policy are still being ironed out, a recent state survey indicates that 17 colleges have already implemented the policy.

One implementation challenge to date, according to Liston, has been that college staff have been manually reviewing high school transcripts to determine student placement, which has been time consuming and may potentially lead to inconsistencies in implementation of the placement policy. The state is currently working toward digitizing this process so that transcript data can be automatically analyzed within colleges' student information systems to determine if students meet the policy's criteria.

To ensure that the new policy is effective in placing students accurately, NCCCS continues to gather evidence to understand both the implementation and the success of the policy in terms of how well the students who are placed using the new policy perform in college-level courses. NCCCS and CCRC researchers will follow up on the students who are being placed using the new measures, to gauge their success in college-level courses. They will also document implementation challenges and opportunities for the new policy, and CCRC's evaluation will also examine the effectiveness of the other components of the Developmental Education Initiative.

**Figure 2. North Carolina's Policy for Placement into Credit-Bearing English and Mathematics Courses**





All high school students in **Tennessee** take the ACT, and their scores are used to determine placement in college-level mathematics and English courses. Individual colleges and universities have their own cut scores to determine whether a student should be placed into credit-bearing courses or whether a student requires “learning support,” the term used in Tennessee for remedial education. Although Tennessee does not currently use measures such as GPA or grades in individual high school courses, there have been efforts to move students more quickly into credit-bearing courses at the college level.

### **Moving Toward a Co-Requisite Course Model**

According to Melissa Stugart, the Alignment Director in Tennessee, the state is moving towards a co-requisite model in which students take learning support courses simultaneously with college-level courses, making the learning support course “no longer a gatekeeper but a gateway” course. Four-year institutions in the Tennessee Board of Regents system already use this co-requisite course model (University of Tennessee institutions do not offer learning support courses), and the 13 Tennessee Board of Regents community colleges will be required to implement this model by the fall of 2015.

### **Implementing an Early Remediation Program**

In a slightly different approach to getting students into credit-bearing courses more quickly, Tennessee has implemented an early remediation program at the secondary level: the Seamless Alignment and Integrated Learning Support (SAILS) program. Through this program, college-learning support courses, in which students can earn their remediation credits within the high-touch environment of a high school classroom, are taught free of charge during grade 12. This program allows high schools to provide a “more competent and structured senior-year opportunity for students,” says Stugart.

The initial SAILS efforts have been in mathematics, a discipline for which most Tennessee colleges use Pearson’s MyMathLab to deliver and assess required mathematics competencies. The high school SAILS course is a hybrid model, in which content is provided online in a lab with a high school teacher present, and a community college instructor comes in to the classroom once a week to assist. Currently, approximately 8,000 students are enrolled in the program, with the plan to reach 15,000 students next year and 30,000

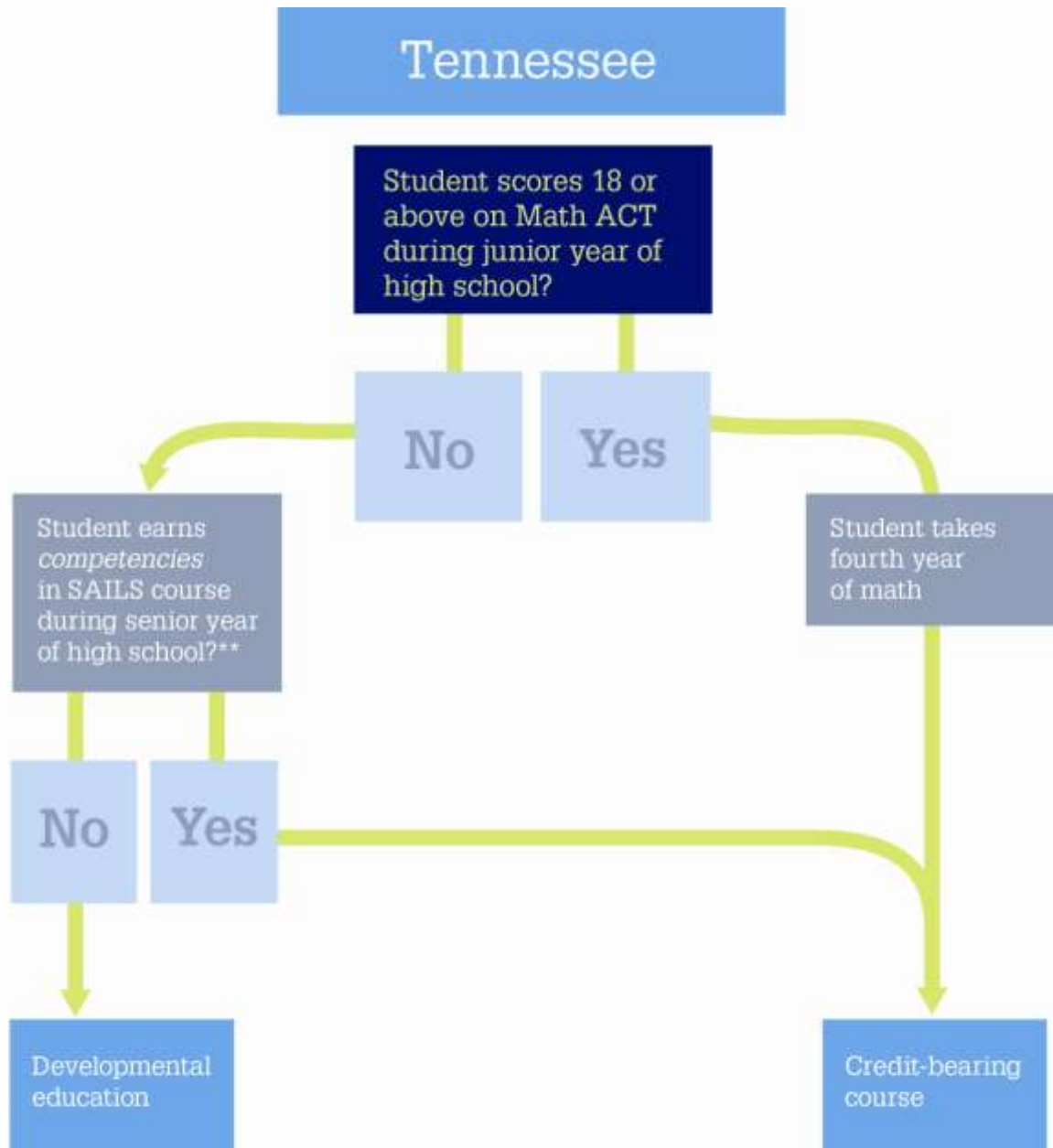
students eventually. According to Stugart, students who earn *competencies* in this grade 12 course will be able to enroll directly in credit-bearing college mathematics courses the following year—increasing chances for postsecondary success for those students by removing the barrier of required remediation. While the course’s focus is currently on mathematics, the Tennessee Higher Education Commission has been granted funding to begin developing a SAILS pilot in reading and writing as well.

According to Stugart, implementing the SAILS program has been fairly straightforward because Tennessee already had in place a requirement that students who score below 18 on the ACT in mathematics are placed into some kind of remedial grade 12 mathematics course. The biggest pushback to date has been from high schools that do not have the program and wish they had the pilot in their school.

Currently, the two higher education governing boards in Tennessee (Tennessee Board of Regents and University of Tennessee) have agreed to use PARCC data for placement, similar to how Tennessee is currently using the ACT, but there are still questions about how the new scores will be used during the transition period.

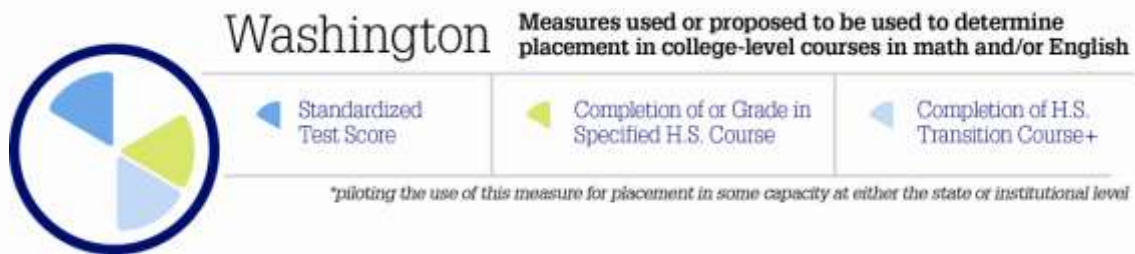
Figure 3 provides a visual summary of Tennessee’s placement policy.

**Figure 3. Tennessee's SAILS\* Pilot Program for Placement into Credit-Bearing Mathematics Courses**



\*Seamless Alignment and Integrated Learning Support

\*\*This scenario applies only to students who complete the SAILS course. All students who score below 18 on the Math ACT are required to take a Bridge Math course during their senior year. Tennessee is piloting the SAILS program as a part of its Bridge Math program. In SAILS, students earn competencies that enable them to be placed into entry-level, credit-bearing college coursework; however, other Bridge Math courses do not lead to these college-placement competencies.



In **Washington**, assessment and placement policies for the 34 public two-year colleges are made at the college level by each of the colleges. In 2008, the state mandated that colleges work to improve all students' progression towards graduation, and there have been efforts at both the state and local levels to respond to that mandate. The Washington State Board for Community and Technical Colleges (SBCTC) has provided support by sharing research on national trends and effective practices in assessment and placement. SBCTC has also provided grant support to colleges to develop transcript-based placement indicators. Core to College funding has been leveraged to, among other things, give a handful of colleges mini-grants to support their efforts in using multiple measures for placement, with a particular emphasis on transcript-based placement.

The state is also continuing to consider how the Smarter Balanced assessments could complement the work already underway with transcript-based measures. SBCTC will be hosting a summit with presidents, provosts, and school district superintendents in the fall of 2014 to discuss the use of Smarter Balanced grade 11 assessments for placing students. According to Bill Moore, Washington's Alignment Director, there is interest in using the Smarter Balanced assessments for placement, but there is also a general recognition that many students may fall short of the college readiness standards, especially initially.

There is also design work underway through Core to College to develop transition college readiness courses that districts could offer to grade 12 students beginning in 2015/16. These courses would be co-designed by higher education faculty and high school teachers; students successfully completing these courses would be able to enter college-level courses in mathematics and/or English without remediation or additional placement testing. Smarter Balanced assessments and transcript-based information would likely coexist as alternative placement measures for students. Students who do not meet the appropriate standard for placement, based on the Smarter Balanced assessments' identified thresholds, would have the option of taking a transition course. A student's performance in the transition course would then be used as an indicator for meeting college readiness standards. A student who does not perform satisfactorily in the transition course could then opt to take a placement test when he or she enrolls in college.

In another effort to find ways to provide more accurate placement and to move more students into college-level courses more quickly, several colleges have worked with their



local high school districts to develop a series of translation tables that indicate how performance in specific courses in mathematics (or, in a small number of cases, English) can be used to determine course placement at the college level. Green River Community College and Cascadia Community College, described in the following sections, provide two examples of how these translation tables are being used.

### **Mathematics Placement at Green River Community College**

***Developing an in-house entrance exam.*** In 2001, in response to the state mandate to increase students' progression toward graduation, the Green River Community College (GRCC) faculty came up with the idea of an entrance exam that would be administered to students in remedial mathematics courses during the first week of each course. This exam would serve to either validate student placement in that course or to inform changes as necessary. According to Laura Moore-Mueller, a mathematics faculty member at GRCC, there had been anecdotal evidence that some students who had been placed into Arithmetic or Elementary Algebra remedial courses had taken more advanced courses in high school, such as pre-calculus, and likely should have been placed at a higher level. After the entrance exam (called a MAPS test) was used, many students who were initially placed in remedial mathematics were promoted to credit-bearing mathematics courses, while a smaller proportion of students were placed into lower-level courses.

***Creating translation tables.*** To address the issue of more accurate initial placement, Moore-Mueller began meeting with high schools to discuss developing a matrix that would translate students' performance in specific high school mathematics courses into course placement at the college level. Over the years, the mathematics team created a series of mathematics course translation tables for 10 feeder high school districts.<sup>8</sup> These translation tables require ongoing work, since course offerings at high schools districts have changed and will continue to evolve with the introduction of the Common Core.

The development of the in-house entrance exams and the high school translation tables has given GRCC students various options for placement. Currently, all students at GRCC still take the COMPASS test for placement in mathematics. However, if a student feels that he or she is prepared for a higher-level course than the COMPASS score indicates, the student has several options (in addition to retaking the COMPASS test). One option is to take GRCC's in-house entrance exam for a specific course, to demonstrate proficiency in the prerequisite skills. Another option is to submit a recent high school transcript to an adviser or faculty member, who identifies the student's grade in the most recent correlating high school course taken, and then uses a translation table that recommends student placement based

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<sup>8</sup> GRCC's English faculty have developed similar translation tables for placement in English for two of the school districts as well. This work began later for English and is expanding to conversations with more school districts.

on the grade in the correlating high school course. This option is available for students who have taken the high school course within two years of enrollment in the college.

According to Moore-Mueller, the biggest challenge to implementing this multiple-measures strategy at GRCC was finding the right people to talk with at the high schools. The hierarchical nature of the K–12 system required working with representatives at various levels, including superintendents, principals, and mathematics faculty. Other challenges included raising awareness about the availability of GRCC’s multiple measures system among college counselors and education planners, and ensuring that these staff could advise students of the various ways in which they could qualify for college-level courses.

***Evaluating GRCC’s multiple-measures placement strategy.*** GRCC has done extensive work to gather and analyze data on the success of student placement using multiple measures. Funded by a Core to College mini-grant, GRCC mathematics faculty led an effort to digitize students’ transcript data. They compiled twelve quarters of high school and college transcript data in order to analyze the academic outcomes for students who were placed solely by the COMPASS tests versus outcomes for those who had challenged their original placement and were placed using high school transcripts or GRCC’s internally developed entrance exam (MAPS). This research examined both whether students received college credit for the course they were ultimately placed into and whether they met the prerequisite grade for the next-level mathematics course. The analysis was completed for Intermediate Algebra and for the three initial college-level mathematics courses (i.e., Math 107, 147, and 141).

The results of the analysis demonstrate that students who had challenged their COMPASS placement and had subsequently been placed in a higher course using the MAPS test or high school transcripts performed as well as the students who had been granted admission to the course using the COMPASS test results. Furthermore, the analysis found that students who had taken the prerequisite remedial courses did not perform as well as students who had been placed either using the COMPASS test results or based on high school course performance. GRCC continues to gather data to examine the relative course success rates of students who were placed into college-level courses by different placement methods.

### **Mathematics Placement at Cascadia Community College**

Cascadia Community College (Cascadia) provides another example of how colleges in Washington are utilizing multiple measures for placement. Cascadia is one of the five community colleges in the Snohomish County Math Consortium, established in 2010 to develop and administer a common assessment for college readiness in mathematics to determine eligibility for college-level courses early on. According to Megan Luce, a mathematics instructor at Cascadia, one major goal of this assessment was to encourage more students to take mathematics courses in their senior year of high school.

**Measuring students' college readiness in grade 11.** The consortium's work began with efforts to test every grade 11 student in local high school districts that are feeders to the five colleges in the consortium. Students were tested for mathematics readiness using an assessment developed locally by the colleges and made available to the high schools free of charge. Earning a passing grade on the test allowed students to place directly into college-level courses in each of the five colleges. Students who did not achieve a passing grade on the test but had completed Algebra 2 would qualify for an Algebra 3 course that was developed jointly by Cascadia and Northshore School District to help prepare students for college-level courses.

**Developing translation tables.** In addition to these efforts by the consortium, Cascadia is working on a separate initiative, following GRCC's model, of developing agreements with local high school districts to create translation tables that map performance in specific high school courses to placement into college-level courses. According to Luce, the faculty member who led these efforts at Cascadia, one motivation for following GRCC's model was that the faculty wanted to provide an incentive for students to take mathematics during their senior year of high school, showing them that successfully completing a grade 12 mathematics course could guarantee placement into college-level mathematics courses.

Luce says that the work that had previously been funded by Core to College to align curriculum between secondary and postsecondary systems had laid the groundwork for increased collaboration between high school and college faculty, resulting in the creation of these translation tables as well as creating greater buy-in among college faculty for the multiple-measures placement strategy. Luce notes that, as with the GRCC model, the challenge at Cascadia is ensuring that all counselors are aware of the option for students to use the translation tables to challenge their placement.

Unlike GRCC, Cascadia has not yet been able to systematically gather and analyze data to assess the effectiveness of the placement measures. According to Luce, another challenge is the capacity to gather data and to evaluate these efforts. However, some data are available and have shown that these efforts had made some difference, including an increase in the number of students taking a fourth year of high school mathematics since the consortium began its efforts in this area.

### **Next Steps for Washington**

Bill Moore, Washington's Alignment Director, notes that there is much activity at colleges throughout the state with regard to transcript-based placement. Incorporating a focus on the Common Core and the Smarter Balanced assessments into these efforts should help inform and enrich the efforts across the state. Says Moore, "The challenge for scaling up the transcript-based placement work is that it's labor-intensive in a local-control state like Washington. My hope for the Common Core is that it drives greater convergence in the high school curriculum, which would allow us to develop a more standardized transcript rubric for

placement that could become a basic template, making these efforts easier and more efficient.” Moore thinks that there will need to be continued discussions about the Smarter Balanced grade 11 assessments and how they can coexist with the current transcript-based evaluations currently in place in many colleges.

# Key Takeaways and Next Steps

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It is clear that, whether or not Core to College states are considering using multiple measures for placement, most states are looking closely at the numbers of students requiring remedial or developmental education in their colleges and considering options for how best to get more students into credit-bearing courses more quickly with the best chances for success. While the strategies used may differ, many states and institutions are experimenting with alternatives to using a single standardized placement test as the sole measure for placement into college courses.

The catalyst for these new approaches has primarily been the recognition that developmental education has not always provided a sufficient gateway for students into college-level work. As these new approaches unfold, the implementation of the Common Core State Standards (CCSS) may also impact how states and institutions address the issue of placement and remediation. With the CCSS-aligned assessments on the horizon, states are looking to learn how well the new tests will be able to predict college readiness. States are also anticipating ways in which they might incorporate the CCSS-aligned assessments into their already-established placement frameworks.

As detailed in earlier Core to College evaluation reports, the 11 Core to College states have various governmental and policy structures that have led to strikingly different alignment processes within and across the states. It is no surprise, then, that noticeable and contextual variations regarding placement procedures for entry-level, credit-bearing coursework exist across these states. States take different approaches, in part, based on what they think is in the best interest of their students. For some states, this means a set of standardized cut scores, helping their students move within and across systems with relative ease. For others, this means a more individualized approach to placement, which looks beyond test scores at additional factors and qualities. While some states have embraced the national research that shows that GPA and other measures can be better predictors of student readiness for college than standardized test results, others are wary of the subjective nature of grades and are cautious about reducing their reliance on a standardized placement test.

## Observations and Recommendations for Implementing Effective Placement Policies

While there is not yet a great deal of evidence about the outcomes of the various state efforts described in this report, several observations and recommendations have arisen from this work:

- **Conduct validation studies to determine the efficacy of placement policies.** Whether states and/or institutions are using a single standardized placement test or experimenting with multiple measures, validation studies can be conducted at the state, regional, and/or local levels to provide information on the best predictors of successful placement.
- **Utilize the results of validation studies to determine the cost and efficiency tradeoffs.** Adopting a multiple-measures strategy may require additional responsibilities for counseling staff, additional data sharing or collection mechanisms, and greater collaboration between K–12 and higher education faculty, all of which come with additional costs. Each state will need to determine whether the improved accuracy of placement, and the possibility of sending fewer students into remedial courses, helps to offset these costs.
- **Share the results of pilot efforts with others within and across states.** There is a need for collective learning about the benefits and challenges of using alternative approaches to placement. States and institutions can learn a great deal from one another by sharing data on student outcomes that result from using different placement approaches. Preliminary results of statewide policy changes in Florida, Massachusetts, and North Carolina may be of particular interest to the Core to College states.
- **Take stock of what is happening during grade 12.** Many states are currently utilizing testing in grade 11 to determine which students may need additional support in order to become college ready prior to finishing high school. To help students become college ready, it will be critical to understand whether schools' grade 12 supports can be closely linked to higher education expectations for incoming students.
- **Ensure that data processes and procedures are in place as part of the implementation of a multiple-measures strategy.** In many open-access institutions, students are not required to submit transcripts for admission. Without good procedures for data sharing in place, it may be difficult to actually use measures involving students' transcripts (e.g., GPA, grades in specific courses) to place students.
- **Consider how the new CCSS-aligned assessments can fit into overall placement policy.** The CCSS-aligned assessments may fit in well with states' efforts to utilize early assessments and grade 12 transition courses, but states must have a plan in place to validate the results of these assessments in order for them to be used accurately and effectively.
- **Address the issue of alignment between K–12 and higher education.** Most of the strategies discussed throughout this report require communication and collaboration between these two segments. This sort of collaboration would involve aligning the

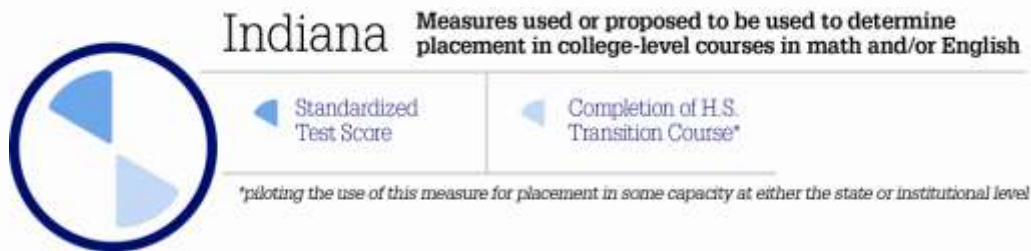
expectations that colleges have for incoming students and the content and expectations that high schools have for students in key courses during grades 11 and 12.

The choice to broaden placement policy to include multiple measures beyond a single standardized test score involves tradeoffs, including potential tradeoffs between precision and cost, test validity and face validity, and local policy variation and uniform statewide implementation. However, to make the most informed decisions, states must examine the predictive validity of current placement processes and determine whether those processes are providing results that help their students succeed.

# Appendix A: Additional Summaries of States' Placement Policies

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This appendix presents summaries that outline the current approaches to placement in the Core to College states that are not currently using multiple measures in placement policies, as well as any plans for incorporating the CCSS-aligned assessments into those placement policies.



In **Indiana**, there have been some informal discussions about using portfolios of student work as part of the placement process, but overall, colleges use a standardized test score to determine placement. Two-year institutions primarily use ACCUPLACER or allow students to substitute a score from the SAT or ACT assessment if the score is high enough. Discussions of the use of multiple measures may continue to evolve from the work currently being done around placement and remediation.

Samuel Snideman, Indiana's Alignment Director, says he has the sense that institutions would not necessarily be against using multiple measures and may generally believe that multiple methods, if well implemented, would be beneficial to students. He believes that the institutions of higher education in the state would welcome the opportunity to have better predictors of student readiness. However, he also commented that creating a system to utilize multiple measures for placement could encounter some challenges, including (1) legislative mandates without corresponding funding and (2) technology systems with limited capabilities.

## Legislation Impacting Indiana's Placement Measures

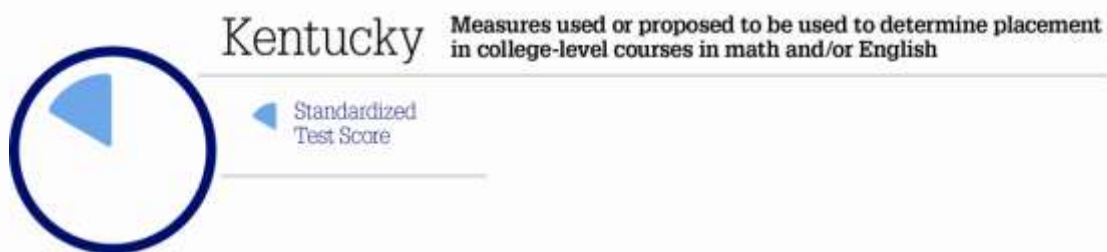
Following legislation in July 2013 that prohibits Indiana's continued participation in PARCC, the state is now developing state-specific standards and plans to have them adopted by



July 1, 2014. State assessments are being piloted in the spring of 2014, with an operationalized field test planned for spring 2015.

In May of 2013, Indiana House Rule 1005 was signed into law. It requires K–12 schools to develop a remediation plan for students who do not achieve a passing score on the graduation examination and thus are not on track to be prepared for college-level coursework. The remediation plan is intended to allow students to address learning needs over the final two years of high school. The state adopted, and trained educators to implement, two readiness courses developed by the Southern Regional Education Board (SREB) for use as transition courses for students needing remediation in their junior and senior years of high school.

The state is also in the process of working with its higher education institutions to propose that students who successfully complete the SREB courses be considered ready for college-level work without remediation.



In **Kentucky**, a placement policy exists that ensures that students who meet statewide benchmark scores for college readiness on approved standardized tests have access to credit-bearing college coursework, without need of remediation. Students who do not meet benchmark scores are placed into developmental education or supplemental courses (credit-bearing courses with academic supports) based on ACT, SAT, or placement test scores recognized by all public postsecondary institutions.

All public high school juniors take the ACT. Students who do not meet benchmark scores have access to intervention programs while in high school. After the intervention programming, students can retake the ACT (or SAT) to meet benchmarks or take a placement exam to demonstrate readiness for credit-bearing coursework. Specifically, students can take the Kentucky Online Testing exams (offered free and online) or the ACT Compass exams (offered at no cost to the student). These subsequent measures indicate whether students may enroll in entry-level, credit-bearing coursework without remediation or additional testing. Some postsecondary institutions also use a variety of institutional placement tests to supplement the placement process.

As a statewide policy, GPA and other non-placement measures are not considered in the placement process. Former Kentucky Alignment Director Shannon Gilkey says that one of the reasons why these other measures are not used in placement is that the state “[doesn’t] want to create a situation where the assessment is undermined or we have created loopholes.” He notes that there is wariness about whether or not GPA can be considered a good indicator of college readiness: “We can control the exam, but we can’t control the subjectivity of a course.”

### **Examining the Current Placement Process**

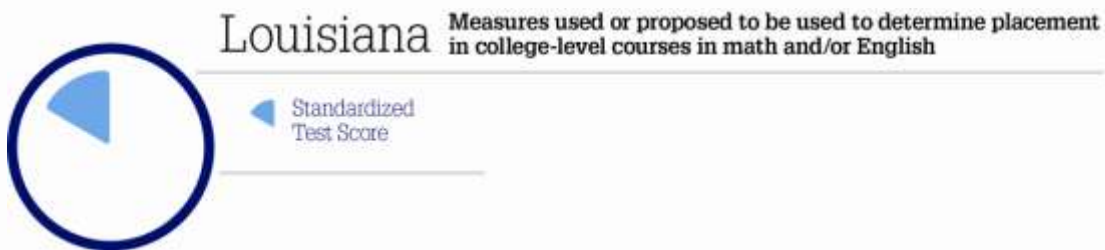
The Kentucky higher education system leadership acknowledge that current institutional placement practices may not be benefiting students, and are discussing how to increase placement accuracy. The current solution is to “benchmark everyone and then better support those who are at or near benchmark.” Gilkey notes that there is awareness that students who are “on the cusp” may be getting placed into developmental courses when they may be ready to take credit-bearing courses.

Gilkey and his colleagues are analyzing 2005–12 student data records to better understand how students have performed under the current placement process. The focus of this study is on students who were determined *not* to be college-ready, and on examining the courses these students took, their developmental education performance, their completion of gateway (credit-bearing) courses, and their graduation rates. If possible, the research team will then link these data to financial data to show how these students are performing and the costs involved.

### **Reviewing Other Possible Developmental Education Models**

Institutional and state college-readiness leaders are reviewing developmental education program models that are more effective in leading to completion of remediation in accelerated time frames and successful completion of gateway courses, such as co-requisite and supplemental course models. Co-requisite models under review are models with a supplemental course or lab in the content area (one credit hour) attached to a credit-bearing course or content course. Another co-requisite course model includes required academic supports, such as additional class periods; required labs, mentoring, tutoring, and/or advising; and increased monitoring of student academic performance.

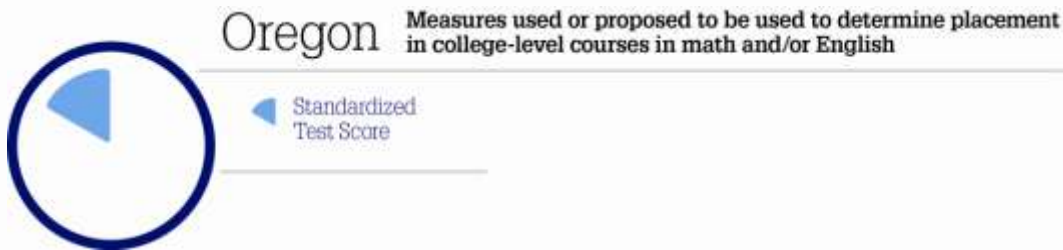
These models might also be considered for students just meeting the readiness benchmarks. However, Gilkey says that requiring this type of co-requisite model for students who just meet the benchmark would prove challenging, saying, “It’s hard to tell students that you’re at benchmark but you [still] need to do a co-requisite model.” As a result, Kentucky may pursue a model that requires the co-requisite course for students below the benchmark and makes it optional but strongly advised for students scoring at or near the benchmark.



**Louisiana's** state policy spells out cut scores for placement into credit-bearing, entry-level college courses. These cut scores are consistent for all two- and four-year institutions. Students may use scores from a variety of assessments (such as ACT, SAT, and COMPASS) to satisfy placement requirements. State leadership have discussed incorporating the PARCC grade 11 assessments as an assessment option. Once student performance data are available, a decision will be made on adding the PARCC assessments to the placement policy as an additional measure for placement. As part of this work, the state Board of Regents will also need to determine comparable PARCC cut scores. As several nearby states are Smarter Balanced states, the Board of Regents may also add the Smarter Balanced assessments as another placement measure.

Karen Denby, senior policy analyst with the Board of Regents, highlights the distinction the state draws between admission and placement. She notes that several state colleges use multiple measures (such as performance in core courses in high school, GPAs, and ACT scores) for admission—presenting, in essence, a more “holistic” way of admitting students—but she emphasizes that this is true of admission and not of placement. “There is a floor that students must meet [for placement],” she stresses.

Louisiana does not use GPAs or high school grades to place students. As in Kentucky, administrators and policymakers do not feel that they are reliable measures because they appear to be subjective compared to more traditional standardized tests. In addition, Denby notes that subjective measures are potentially troublesome because of the increased time and financial effort that they require, and that using these measures would reduce overall systemwide consistency. Louisiana's main goal is to provide the flexibility for students to move and transfer among institutions, and state leaders believe that a more standardized test-based placement process provides the most consistent transferable measure of readiness.



With a history of local control, **Oregon** community colleges use a variety of placement tests, typically a combination of the COMPASS and ASSET tests. In four-year institutions, there is an even wider variety of placement tests, with some using ACCUPLACER and others using locally developed tests, most of which are mathematics-focused.

### Preparing for the Smarter Balanced Assessments

With the upcoming implementation of the Smarter Balanced assessments, Core to College efforts in Oregon have focused on use of these assessments for determining readiness for college-level courses and for providing just-in-time assistance to high school seniors. Work groups including K–12 administrators, two- and four-year college administrators, and college faculty have been meeting monthly to discuss Smarter Balanced achievement level descriptors and how they can be used to make decisions regarding senior-year student course placement. For each of the four achievement level descriptors, the work groups are mapping what students will need to do during their senior year to become and/or remain ready for college-level courses.

Former Oregon Alignment Director Kathy Hurwitz describes this work as crafting “if-then” statements: “If a student is at level X, then Y needs to happen for the student to become or stay college ready.” Even though the Smarter Balanced assessments are still being finalized, the work groups are moving forward with policy discussions and recommendations. They will put out a policy statement in May 2014, and they plan to present it to the central office administrators in February 2015. Challenges include trying to create a policy around an assessment that has not yet been implemented, as well as public perceptions and buy-in around the CCSS.

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