Foreword: Remediation Revolution

College Readiness Is Key to Improving College Completion

Students’ Perceptions, Students’ Realities

Faculty Members and Effective Placement

Questions for Consideration

“The secret to getting ahead is getting started.” — Mark Twain

This report is dedicated to the two-thirds of community college students who enter our institutions every year underprepared and not ready for college-level work. They face significant challenges, yet they still enroll and move forward with their education. They started—and we owe them the guidance and supports they need to continue.

For many, unfortunately, just starting is not enough. For that reason, this report is also dedicated to the community college adjunct and full-time faculty, staff, and leaders who are actively committed to improving assessment, placement, and developmental education. Their efforts move students from being underprepared to being ready for college-level work.

Many in the field also are working to expand knowledge about practices that help the underprepared student. The Center builds on their work, and we are grateful for their commitment. Thank you to Achieving the Dream; Carnegie Foundation for the Advancement of Teaching; Community College Research Center at Teachers College, Columbia University; The Charles A. Dana Center at The University of Texas at Austin; and many others.

While there is an escalating amount of rethinking and rebuilding of the college on-ramp for underprepared students, we encourage everyone to remember that there are real people behind every statistic describing the number of students in developmental education.

Developmental education is broken—and it is worth fixing. Just as students must have the courage to start, so must we press on to redesign the entry process to ensure that all students are successful.

Evelyn N. Waiwaiole
Director
Center for Community College Student Engagement
Remediation Revolution

The decade since 2004 has brought profound reexamination of the role and results of developmental programs in community and technical colleges around the country. Pushed by the emerging student success and completion agenda, colleges have dealt with intense scrutiny and a demand for the redesign of these programs.

Developmental education started in the 1960s to serve students who were perceived to be unprepared for college-level instruction. It has operated under names like remedial, foundational, transitional, guided, basic skills, and developmental studies. Most colleges created programs with multiple levels of remedial reading, writing, and math. A common pattern included three levels in each area before students were deemed ready for college-level instruction. Some institutions developed as many as five levels in math.

Beginning in the early 2000s, a call for a culture of inquiry, evidence, and accountability has led over time to a thorough reexamination of developmental education. Longitudinal tracking of student progression through developmental courses has called attention to dismal results, particularly in math. In addition, using a single high-stakes test to assess readiness has come under criticism and led to a push for using multiple measures for assessment and placement.

At the same time, colleges are being asked to increase completion rates. Informed by the poor success rates of underprepared students, the American Association of Community Colleges’ 21st-Century Commission on the Future of Community Colleges presented institutions with a formidable challenge: Double the rate of students who complete developmental programs and progress to successful completion of college-level gatekeeper courses by 2020.

Fortunately, pioneering work by Achieving the Dream and Completion by Design; state work on both developmental education redesign and performance funding, including success or momentum points; and other initiatives are helping colleges rise to the redesign and completion challenge—to transform the way they view their mission to prepare students for college-level instruction.

Many colleges are piloting efforts to reduce the levels of remediation and accelerate progress through gateway courses. Examples include the following:

- A push to directly place all students in gateway courses with corequisite support is gaining ground.
- In some states, legislative action has removed any requirements for students to enroll in developmental courses.
- Partnerships with K–12 are emerging to reduce the numbers of students with a need for any remediation.
- Curriculum alignment processes are opening the door to pathways for student progression.

The work going on around the country amounts to this: A revolution is underway to significantly alter the way colleges deliver whatever remediation may be required.

What must not be lost in this transformative time are the faces and prospects of the students. For many of them, the community or technical college is a last chance to succeed.

Many community college students did not have successful K–12 experiences, and many have been out of school for years. If they fail in the first semester of developmental courses, their life prospects are minimal. The same is true for students going directly into gateway courses even when corequisite supports are provided. Just as health professionals seek to drive infection rates to zero in emergency and operating rooms, college professionals need to work for zero failures in helping students complete college-level courses and move into pathways to success.

The developmental education movement, started in the 1960s, must now take dramatic steps to improve outcomes that will benefit students, college service areas, regions, states, and the nation.

Byron McClenney
Partner, Mc² Consultants
Member, Colorado State Board for Community Colleges and Occupational Education
Improving college completion is a shared objective of higher education. It is the focus of colleges, foundations, state governments, and the White House. Students have gotten the message—their aspirations are on the rise. But the nation’s collective ambition far exceeds today’s outcomes. Many students are not attaining their goals.

College readiness is at the heart of this disconnect between aspirations and results. If student outcomes are to equal student aspirations, colleges must be more effective in helping underprepared students move into—and successfully complete—college-level work.

**Build on What Works, Fix What Is Broken**

Sixty-eight percent of community college students require at least some developmental education. The disconnect between high school graduation requirements and college readiness is real, but it does not change the essential job of community colleges: educating the students who walk through their doors. And the persistent reality is that the majority of those students are underprepared.

Data from the Center for Community College Student Engagement show that 65% to 70% of developmental education students believe their placement in developmental education is appropriate. However, assessment and placement are only the first steps for underprepared students. The next step, developmental education, is the critical barrier. The majority of students who place into developmental education—even when they feel they are placed appropriately—are not successful. Many in the field now acknowledge that developmental education is broken.

**Testing New Approaches**

As they have done throughout their history, community colleges are addressing ongoing concerns by testing new approaches to assessment, placement, and developmental coursework. Innovative strategies that are showing promise include the following:

- **Multiple measures for assessing readiness.** A recent Community College Research Center study found high school GPA to be more predictive of student success than current placement tests in one large...
community college system. Now some colleges from across several states are using a hierarchy of measures to place students into the most appropriate-level courses.

Corequisite courses. In this model, students taking a developmental class are required to concurrently enroll in a higher-level class in the same subject, typically taught by the same instructor. The paired courses create a cohort of developmental students who work with stronger students in the higher-level class and receive focused attention in the developmental class. The approach accelerates progression through developmental education, and data from Indiana, Tennessee, and West Virginia show dramatic gains from using it: “Students enrolled in single-semester, corequisite English courses typically succeeded at twice the rate of students enrolled in traditional prerequisite English courses. Students enrolled in corequisite gateway math courses that were aligned with their chosen programs of study saw results at five to six times the success rates of traditional remedial math sequences.”

Redesigned math. The New Mathways Project, for example, creates differentiated math pathways that redesign math classes and align them with students’ programs of study. With this structure, STEM students take college-level algebra while students in other fields can take alternative classes, such as statistics or quantitative reasoning, that meet their program needs. “Based on early studies, students in the new sequences are three to four times as successful in passing college-level math requirements as students in standard remedial sequences over a similar or shorter time period.”

Accelerated developmental courses. Students placed in a developmental math or English sequence frequently face multiple levels of developmental classes before they can enroll in credit-bearing courses. Accelerated math and English programs redesign the developmental sequence to reduce students’ time to completion. Institutions often provide these redesigned classes in concert with innovative pedagogies and/or

Number One Priority: Improve College Completion

In 2004, 45% of community college students said they aimed to complete a certificate. By 2014, that figure had increased to 53%. In the same time period, the percentage of students who intended to complete an associate degree grew from 79% to 84%.

Today, multiple individuals and organizations are calling for more certificates and degrees. What follows is a sampling of college completion goals for the nation.

In 2012, the 21st-Century Commission on the Future of Community Colleges called on colleges to increase completion rates of students earning community college credentials (certificates and associate degrees) by 50% by 2020 while preserving access and enhancing quality. A recent report on progress toward this goal concluded that to meet the goal, colleges must, among other things, “increase the rate of success of incoming students.”

Lumina Foundation has set a completion goal: 60% of Americans will hold a college degree, certificate, or other high-quality postsecondary credential by the year 2025. It is an ambitious goal, given that today, only 40% of Americans hold such a credential—and that this figure increased only 2 percentage points over five years (2008 to 2013).

The Bill & Melinda Gates Foundation has set a goal of dramatically increasing the number of young people who obtain a postsecondary degree or certificate with labor-market value.

President Obama also has set a goal: By 2020, America will once again have the highest proportion of college graduates in the world.
additional supports. Research suggests that students in accelerated programs are more likely to enroll in gatekeeper courses and as likely to pass.12

- **Computer-assisted developmental math.** This approach accelerates developmental math with a web-based learning system offered in a computer lab. Each student works at his or her own pace and progresses through course content as he or she masters each concept. Students have access to their instructors as well as to tutors and other faculty.

- **Developmental education paired with workplace skills.** For example, in Washington state’s I-BEST (Integrated Basic Education and Skills Training), basic skills students take college-level classes co-taught by basic skills instructors and professional-technical faculty. The model helps students build academic skills and/or English language proficiency, advance more quickly toward earning a credential, and develop workplace skills. High school partnerships. Partnerships with high schools allow colleges to offer summer bridge and other transition programs. These collaborations increase the likelihood that students will enroll in college, increase the number of students who are college ready upon enrollment, and help students persist once they become college students.13

- **Improved preparation for placement tests.** Some colleges are improving their preparation tools and/or offering—or requiring—brush-up experiences.

Concerns about assessment, placement, and developmental education are so strong that measures have been imposed, rather than undertaken, in some states. These measures include limiting developmental education, eliminating developmental education, and modifying or restricting the use of placement tests. To improve outcomes, colleges must be willing to try new approaches, but those approaches must be grounded in research about what leads to better results. And all of these efforts begin with understanding what is really happening with underprepared students.

This report describes students’ typical experience with assessment, placement, and developmental education. Based on responses from approximately 70,000 community college students from more than 150 institutions across the country, it looks at the current experience of underprepared students and raises questions about next steps for colleges in these critical areas. There is a disconnect between current practice and emerging strategies that show promise, but there is no silver bullet. Therefore, there is much work to be done as the field creates and refines new models of assessment, placement, and delivery of developmental education. Throughout these ongoing improvement efforts, the Center encourages colleges to assess their own data; discuss data with faculty, students, and others; update processes based on new information; and continue to evaluate success over time. In this way, every college, and collectively the nation, can move toward the bold completion goals that will best serve our students.
In March 2013, Davidson County Community College (NC) adopted and began full-scale implementation of North Carolina’s Multiple Measures for Placement policy. The college acted immediately after the North Carolina State Board of Community Colleges approved the policy so it would be in place for students entering in summer and fall 2013.

Multiple Measures for Placement is a hierarchy of measures that colleges use to determine students’ readiness for college-level gateway courses:

1. Students with high school transcripts from the last five years reflecting an unweighted GPA of 2.6 or higher and four years of high school mathematics, one of which is beyond the Algebra II level, will be exempt from diagnostic placement testing and will be considered college ready for gateway courses.

2. If a recent high school graduate does not meet the high school transcript criteria, the college will use specified ACT or SAT subject area test scores to determine placement. ACT scores must be at least 22 for reading, 18 for English, and 22 for math; and students must score at least 500 in writing, critical reading, and math on the SAT to be exempt from diagnostic placement testing.

3. New-to-the-college students may place into college-level courses if they have previous college credit indicating college-level readiness.

4. If a student does not meet any of the requirements above, the college will administer the diagnostic placement test to determine placement.

Data for the 2013–14 and 2014–15 academic years show that students placed using high school transcript data succeeded in their gateway courses (earned a grade of C or better) at a higher rate in both English and math than did their peers placed into courses based on other criteria.

Across the two years, 65% of students (N=531) placed using high school transcript data successfully completed the math gateway course, compared with 48% of students placed based on other criteria (N=306).

This same trend holds when disaggregating these data by race/ethnicity. In the English gateway course

- 78% of White students placed using high school transcript data (N=530) succeeded, compared with 63% of White students placed based on other criteria (N=458);
- 65% of African American students placed using high school transcript data (N=40) successfully completed the course, compared with 48% of African American students placed based on other criteria (N=189);
- 76% of Latino students placed using high school transcript data (N=49) were successful, compared with 59% of Other students placed based on other criteria (N=34).

For the math gateway course

- 67% of White students placed using high school transcript data (N=382) succeeded, compared with 58% of White students placed based on other criteria (N=175);
- 41% of African American students placed using high school transcript data (N=29) succeeded, compared with 24% of African American students placed based on other criteria (N=83);
- 77% of Latino students placed using high school transcript data (N=35) succeeded, compared with 63% of Latino students placed based on other criteria (N=16); and
- 52% of Other students placed using high school transcript data (N=29) succeeded, compared with 53% of Other students placed based on other criteria (N=15).

“The first time [I took a placement test], I didn’t have any preparation. The second time, before I left, I saw an advisor. He gave me papers and told me where online I [could] go and get more help.”

— Student
Gulf Coast Partners Achieving Student Success (GCPASS) is a partnership between Lee College (TX) and Goose Creek CISD (GCCISD). Launched in 2012, it is a strong P–16 collaboration that is improving student success.

Started with three of the five GCCISD high schools, the program has expanded into all five GCCISD high schools as well as other school districts in the college’s service area. Today, GCPASS serves 16 high schools and works with nearly 3,000 seniors, more than 1,100 dual-credit students, and large numbers of underclassmen. The partnership provides wrap-around student support through eight separate inter-institutional teams that include educators, parents, professionals, and community leaders. One of the main priorities of the teams is building relationships and trust between college and high school faculty, college and high school counselors, and college and community stakeholders, particularly among the Hispanic population.

To increase college readiness among high school graduates and increase student success in developmental education, GCPASS also strives to closely align the curricula at the high schools and the college. This work includes identifying common course outcomes; establishing successful curriculum sequences; and developing common assignments, grading rubrics, and practices.

To evaluate the impact of this partnership, Lee College is examining the success of GCCISD students in gatekeeper English and math courses. Student success rates are tracked by their GCCISD graduating cohort, which means they could have taken the gatekeeper courses at any point after matriculation.

Successful completion rates for GCCISD students in gatekeeper English stayed relatively flat at approximately 61% for college-ready students from 2010 (N=225) to 2014 (N=234) but increased by 49 percentage points, from 31% (N=26) to 80% (N=40), for those requiring developmental education.

Successful completion rates increased by 9 percentage points, from 47% in 2010 (N=53) to 56% in 2014 (N=149), for college-ready students in college algebra and increased 12 percentage points, from 56% (N=50) to 68% (N=40), for students requiring developmental education.

One of the other goals of this partnership is to increase the number of students matriculating into higher education. According to the Texas Higher Education Coordinating Board, high school graduate enrollment in higher education (whether at Lee College or elsewhere) increased 4 percentage points, from 46% to 50%, from 2013 to 2014.14
Students’ Perceptions, Students’ Realities

Any effort to improve the success of underprepared students must begin with understanding their experience. That experience begins—and too often ends—with assessment using a single test, placement based on a single test cut-off score, and failure to successfully complete developmental or college-level courses.

CCSSE and SENSE data indicate a strong disconnect between students’ perceptions—of their preparedness and of what it will take to complete college—and reality. Moreover, a strong high school GPA does not always insulate students from this misperception. In fact, 40% of SENSE respondents reporting a high school GPA of A also report placing into one or more areas of developmental education.

Recent research suggests there are limits to the value of a single placement test score for assessing student preparedness and instead proposes using multiple measures of student academic performance. However, until there is clear guidance about the best combination of measures to use and how to use them, the majority of colleges continue to rely on a single placement test score.

While CCSSE data indicate that many students believe their placement is appropriate for their skill level, data from this survey plus CCFSSE raise questions about the role of faculty in evaluating student placement during the initial class periods. One key finding—that faculty teaching developmental education are more likely to use early assessments—may indicate that an expanded faculty role is worth exploring.

IVY TECH COMMUNITY COLLEGE
Expanded Placement Policy Uses Multiple Measures

Ivy Tech Community College (IN) has been using a multiple measures placement policy for degree-seeking students since 2003. Students may submit any of the following documents to be used for placement: ACT, SAT, or PSAT scores for tests taken within the past four years or a high school transcript reflecting a 2.6 GPA or higher, earned within four years prior to entering Ivy Tech. The college added the acceptance of high school GPA to the policy for students entering the college in fall 2014. Students who do not have the above documentation are required to take the college’s custom ACCUPLACER diagnostic assessment.

As a result of the expanded placement policy, the college now places 40% of incoming students based on measures other than ACCUPLACER. Analysis of the success rates of all fall 2014 first-time, degree-seeking students shows that students placed using multiple measures had greater success rates in their first college-level (gatekeeper) course than did students placed using ACCUPLACER.

In math, 68% of students placed using multiple measures (N=895) passed the gatekeeper course, compared with 59% of students placed using ACCUPLACER (N=3,298). In reading, 64% of students placed using multiple measures (N=2,300) passed the gatekeeper course, compared with 57% of students placed using ACCUPLACER (N=6,460). In writing, 64% of students placed using multiple measures (N=1,633) passed the gatekeeper course, compared with 57% of students placed using ACCUPLACER (N=8,060).

Methodology

This report presents data from three Center surveys: the Community College Survey of Student Engagement (CCSSE), the Community College Faculty Survey of Student Engagement (CCFSSE), and the Survey of Entering Student Engagement (SENSE).

For more information about these surveys and the CCSSE and SENSE benchmarks, visit www.cccse.org.

For information about the methodology used in this report, visit www.ccsse.org/nr2016.
Student Perceptions Do Not Align With College Readiness

Student responses reveal a disconnect between their perceptions of college readiness and their actual preparedness. This phenomenon points to the lack of alignment that often exists between expectations for high school graduation and expectations for college readiness.

Most Students Believe They Are Academically Prepared

I am prepared academically to succeed at this college.

<table>
<thead>
<tr>
<th>Agree/Strongly agree (n=54,292)</th>
<th>Neutral/Disagree/Strongly disagree (n=8,974)</th>
</tr>
</thead>
<tbody>
<tr>
<td>86%</td>
<td>14%</td>
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</tbody>
</table>

WHO ARE THESE RESPONDENTS?
Entering students who responded to the SENSE 2014 Promising Practices items (N=63,266)

Yet 68% of Students Take Developmental Education

Percentage of community college students who take at least one developmental education class

<table>
<thead>
<tr>
<th>Take at least one developmental class</th>
<th>Do not take any developmental classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>68%</td>
<td>32%</td>
</tr>
</tbody>
</table>

Students’ self-reported high school GPAs indicate that there continues to be a gap between high school graduation requirements and college readiness.

Better Grades in High School Do Not Guarantee College Readiness

Students Reporting Better High School GPAs Are Less Likely to Need Developmental Education—But the Need Is Still High

My placement test scores indicated that I needed to take a developmental course (also referred to as basic skills, college prep, etc.).
- I needed a developmental course in at least one area
- I did not need any developmental courses

<table>
<thead>
<tr>
<th>Students’ self-reported high school GPA</th>
<th>Students reporting needing developmental courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>40%</td>
</tr>
<tr>
<td>A- to B+</td>
<td>54%</td>
</tr>
<tr>
<td>B</td>
<td>41%</td>
</tr>
<tr>
<td>B- to C+</td>
<td>32%</td>
</tr>
<tr>
<td>C</td>
<td>31%</td>
</tr>
<tr>
<td>C- or lower</td>
<td>30%</td>
</tr>
</tbody>
</table>

Students’ self-reported high school GPA (n=1,353)

Students reporting needing developmental courses (n=2,073)

Students reporting needing developmental courses (n=9,278)

Students reporting needing developmental courses (n=8,514)

Students reporting needing developmental courses (n=12,118)

Students reporting needing developmental courses (n=5,679)

Students reporting needing developmental courses (n=5,962)

Students reporting needing developmental courses (n=12,118)

Students reporting needing developmental courses (n=4,364)

Students reporting needing developmental courses (n=1,941)

Students reporting needing developmental courses (n=1,804)

Students reporting needing developmental courses (n=766)

WHO ARE THESE RESPONDENTS?
Entering students who responded to the SENSE 2014 Promising Practices items (N=61,662)
Students’ Completion Rates Fall Far Short of Their Expectations

Students’ reported academic goals highlight a disconnect between students’ expectations and the reality of their completion.

Most Students Expect to Attain Their Academic Goals Within Two Years

Based on my academic goals at this college, I believe it will take me about this long to reach them:

- Two years or less: 61% (n=35,310)
- More than two years: 39% (n=22,717)

Most Students Believe They Are On Track to Attain Their Academic Goals

I feel that I am on track to reach my academic goals at this college within my expected time frame:

- Agree/Strongly agree: 76% (n=44,289)
- Not sure/Disagree/Strongly disagree: 24% (n=13,722)

Students With Better High School Grades Are More Likely to Believe They Are On Track

I feel that I am on track to reach my academic goals at this college within my expected time frame.

- Agree/Strongly agree: 83% (n=2,653)
- Not sure/Disagree/Strongly disagree: 17% (n=548)

Students’ self-reported high school GPA

<table>
<thead>
<tr>
<th>Grade Range</th>
<th>Agree/Strongly agree</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>17%</td>
<td>548</td>
</tr>
<tr>
<td>A- to B+</td>
<td>20%</td>
<td>3,131</td>
</tr>
<tr>
<td>B</td>
<td>22%</td>
<td>2,950</td>
</tr>
<tr>
<td>B- to C+</td>
<td>26%</td>
<td>4,287</td>
</tr>
<tr>
<td>C</td>
<td>30%</td>
<td>1,708</td>
</tr>
<tr>
<td>C- or lower</td>
<td>34%</td>
<td>1,568</td>
</tr>
</tbody>
</table>

Yet Only 39% of Students Earn a Degree or Certificate Within Six Years

Six-year outcomes for first-time-in-college, degree-seeking students

- Earned a degree at a four-year institution: 29%
- Earned an associate degree or certificate at their starting institution or another two-year institution: 18%
- Still enrolled: 43%
- Not enrolled: 10%
Which Students Take Placement Tests?

Some students take placement tests while in high school, but not all students—particularly those not coming to college directly from high school—have this opportunity.

Students with better high school grades are more likely to take placement tests while they are still in high school. In addition, when students get to college, those with lower high school grades are more likely to be required to take placement tests.

Most Students Are Required to Take a Placement Test

Before I could register for classes, I was required to take a placement test (COMPASS, ASSET, ACCUPLACER, SAT, ACT, etc.) to assess my skills in reading, writing, and/or math.

**WHO ARE THESE RESPONDENTS?**
Entering students who responded to the SENSE 2014 Promising Practices items (N=62,819)

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Students With Better Grades Are More Likely to Take Placement Tests in High School

While I was in high school, besides taking the SAT or ACT, I completed this college’s placement test (ACCUPLACER, ASSET, COMPASS, etc.) to assess my academic skills in reading, writing, and/or math.

**WHO ARE THESE RESPONDENTS?**
Entering students who responded to the SENSE 2014 Promising Practices items (N=61,237)

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Students With Lower Grades Are More Likely to Be Required to Take Placement Tests

Before I could register for classes, I was required to take a placement test (COMPASS, ASSET, ACCUPLACER, SAT, ACT, etc.) to assess my skills in reading, writing, and/or math.

**WHO ARE THESE RESPONDENTS?**
Entering students who responded to the SENSE 2014 Promising Practices items (N=61,237)
Even though most students know about placement tests in advance, most do not prepare for them. However, those who do use college-provided resources to prepare for placement tests generally find the resources helpful. Students with better high school grades are more likely to prepare for placement tests.

**Students Can Prepare, But Most Do Not**

**Most Students Have Advance Notice About Placement Tests**

I became aware that I was required to take a placement test (ACCUPLACER, ASSET, COMPASS, etc.) at this college:

- More than a month before taking the test: 66% (n=34,818)
- A month or less before taking the test: 34% (n=18,228)

**WHO ARE THESE RESPONDENTS?**

Entering students who responded to the SENSE 2014 Promising Practices items (N=53,046)

**Most Students Do Not Prepare for Placement Tests**

Before enrolling at this college, I prepared for this college’s placement test (ACCUPLACER, ASSET, COMPASS, etc.) in the following way:

- I prepared using resources provided by the college*: 41% (n=20,976)
- I did not do anything to prepare for this college’s placement test: 59% (n=29,612)

**WHO ARE THESE RESPONDENTS?**

Entering students who responded to the SENSE 2014 Promising Practices items and took a placement test (N=50,588)

*Respondents indicated that they prepared on their own using online or printed materials provided by the college; participated in a brief, intensive brush-up/refresher workshop; or participated in a multi-day or multi-week brush-up/refresher program.

**PASSAIC COUNTY COMMUNITY COLLEGE**

Sample Online Placement Test Aims to Reduce Time to Completion

Responding to students’ reports that they do not prepare for placement tests, Passaic County Community College (NJ) developed a sample online placement test as a tool for incoming students. The practice placement test, along with linked videos describing how to approach each item, serves as a refresher for students. It aims to ensure that all students are placed at the appropriate levels and not in lower levels due to lack of preparation, therefore reducing their time to completion. Passaic began offering this tool to students in October 2012.

Data from the first three years of implementation indicate that, overall, students who used the tool were less likely to place into the lowest level of developmental education in both English and math than were students who did not use the tool. Moreover, placement into the lowest levels of developmental math and English decreased slightly among students who used the tool, while it held steady or increased among students who did not use the tool.

For students who used the practice tool, placement into the lowest level of developmental math was 19% (N=163) in 2012–13, 16% (N=153) in 2013–14, and 15% (N=145) in 2014–15. Among students who did not use the practice tool, placement into the lowest level of developmental math was 17% (N=281) in 2012–13, 18% (N=286) in 2013–14, and 19% (N=263) in 2014–15.

For students who used the practice tool, placement into the lowest level of developmental English was 30% (N=252) in 2012–13, 29% (N=288) in 2013–14, and 27% (N=266) in 2014–15. Among students who did not use the practice tool, placement into the lowest level of developmental English was 31% (N=512) in 2012–13, 30% (N=472) in 2013–14, and 33% (N=468) in 2014–15.

In addition, the percentage of incoming students using the tool increased from 24% in fall 2012 to 45% in summer 2015. Moreover, while the college’s target audience is its own students, an analysis of web analytics shows that other colleges and high schools refer their students to the online tool.
WASHINGTON STATE COMMUNITY COLLEGE
Mandatory Brush-Up Helps
Students Improve Placement

Despite efforts to encourage new students to prepare for placement tests, Washington State Community College (OH) found that most students did not take time to refresh their English or math skills and that students were often surprised by and disappointed with results that were lower than what they expected. Moreover, students would schedule a retest and expect that by simply taking the test again their scores would increase. Recognizing that it should require preparation, the college introduced a mandatory brush-up prior to retesting. The new policy, introduced in April 2014, requires students to complete a brush-up workshop in English/writing and/or math before retaking the relevant section of the Compass test.

This brief, two-hour brush-up workshop presented by college faculty provides reviews of basic concepts that students may not have used recently. These sessions, available to any student, are held once a month throughout the year and more frequently in the ramp up to registration at the beginning of the term.

However, two-hour brush-up sessions are unlikely to be enough for some students. Institutional data show that students testing below a ninth-grade level in math are unsuccessful even at the lowest level of developmental courses at the college. For these students, the college offers a second, more intensive option: a free 10-week course taught in collaboration with the ABLE (Adult Basic and Literacy Education) program. This course, ACES (ABLE + College Equals Success), focuses on fundamental math content and college success skills.

Based on pre- and post-intervention assessment (students’ placement scores before and after the brush-up workshop), 27% of students who initially tested into developmental math (N=147) increased their placement by one class level, and 5% tested out of developmental math altogether. In English, 56% of 135 students who initially placed into developmental English increased their placement level by one class level, while 33% tested into Freshman Composition. Between 2013 and 2014, the number of students who placed into the lowest level of developmental math or the ACES course dropped from 58% to 48%.

WSCC President Bradley Ebersole says, “The college is doing everything possible to help students move more quickly through their educational path. This best practice created by the faculty and staff is one that helps to enhance student success.”

### Students With Better Grades Are More Likely to Prepare for Placement Tests

<table>
<thead>
<tr>
<th>Students responding</th>
<th>B or higher</th>
<th>Lower than B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>44% (n=12,103)</td>
<td>38% (n=8,488)</td>
</tr>
<tr>
<td>No</td>
<td>56% (n=15,276)</td>
<td>62% (n=13,808)</td>
</tr>
</tbody>
</table>

*Respondents indicated that they prepared on their own using online or printed materials provided by the college; participated in a brief, intensive brush-up/refresher workshop; or participated in a multi-day or multi-week brush-up/refresher program.

### Almost All Students Who Use College-Provided Test Preparation Resources Find Them Helpful

If I used resources from this college or one of the college’s brush-up/refresher experiences, I found it:

<table>
<thead>
<tr>
<th>Helpful</th>
<th>Not helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>96%</td>
<td>4%</td>
</tr>
</tbody>
</table>

*Respondents indicated that they prepared on their own using online or printed materials provided by the college; participated in a brief, intensive brush-up/refresher workshop; or participated in a multi-day or multi-week brush-up/refresher program.

### WHO ARE THESE RESPONDENTS?

Entering students who responded to the SENSE 2014 Promising Practices items and took a placement test (N=49,675)
Many Students Test Into Developmental Education

Emerging evidence indicates that some students who place into developmental education classes could bypass developmental coursework and succeed in college-level work if they have appropriate embedded academic and non-academic support. The Center has long advocated for approaches like this—especially when those strategies make engagement inescapable. The challenge at hand is to design and implement college intake processes that more precisely identify the level and types of support that each student needs to succeed.

Most Students Believe They Are Academically Prepared

Most Students Who Are Required to Take Developmental Education Classes Do So

While more than 80% of students believe they are academically prepared to succeed in college, 67% of students who report taking a placement test also report placing into at least one developmental education class. These data demonstrate the disconnect between students’ expectations for college and the reality that many are not ready for college-level work.

Any type of placement, of course, is meaningless if students do not enroll in the proper combination of courses to meet their needs and receive the academic and non-academic support necessary for their success. Among SENSE respondents, 10% of students who report placing into one or more developmental education classes also report that they were not required to enroll in a developmental education class in their first term. However, among those who were required to enroll, high percentages did so.
Advising Helps Students, But Too Few Students Experience It

When an advisor helps a student develop an academic plan, that student is more likely to succeed. For example, SENSE and CCSSE data show that developmental education students who create academic plans are more likely to complete their developmental coursework. CCSSE data also show that students who develop an academic plan are more likely to complete gatekeeper courses.¹⁷

Less Than Half of Students Say an Advisor Helped Them Set Academic Goals

An advisor helped me set academic goals and create a plan for achieving them.

<table>
<thead>
<tr>
<th>Agree/Strongly agree</th>
<th>Neutral/Disagree/Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>44%</td>
<td>56%</td>
</tr>
</tbody>
</table>

WHO ARE THESE RESPONDENTS?
Entering students who responded to the SENSE 2014 Promising Practices items ($N=63,078$)

Many Students Believe Their Placement Is Appropriate for Their Skill Level

While the majority of students report that they were placed into classes well suited to their skill level, some students report that the work was above or below their skill level.

Students' Perceptions of Their Placement

**ENGLISH**
I enrolled in the English course indicated by my placement test results, and I felt that the course level was . . .

<table>
<thead>
<tr>
<th>Appropriate for my skill level at that time</th>
<th>Not appropriate for my skill level at that time</th>
</tr>
</thead>
<tbody>
<tr>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td>$(n=19,579)$</td>
<td>$(n=8,201)$</td>
</tr>
</tbody>
</table>

WHO ARE THESE RESPONDENTS?
Students who responded to the CCSSE 2015 Assessment and Placement items, took a placement test, tested into at least one developmental education course, were told they were required to or should take at least one developmental education course in their first term, and enrolled in the English course based on their placement test scores ($N=27,780$)

**MATH**
I enrolled in the math course indicated by my placement test results, and I felt that the course level was . . .

<table>
<thead>
<tr>
<th>Appropriate for my skill level at that time</th>
<th>Not appropriate for my skill level at that time</th>
</tr>
</thead>
<tbody>
<tr>
<td>63%</td>
<td>37%</td>
</tr>
<tr>
<td>$(n=18,540)$</td>
<td>$(n=10,753)$</td>
</tr>
</tbody>
</table>

WHO ARE THESE RESPONDENTS?
Students who responded to the CCSSE 2015 Assessment and Placement items, took a placement test, tested into at least one developmental education course, were told they were required to or should take at least one developmental education course in their first term, and enrolled in the math course based on their placement test scores ($N=29,293$)
Colleges are trying to improve developmental education, and some new approaches may help students better engage with their studies.

For example, students enrolled in corequisite English and math classes—a developmental course paired with a higher-level course in the same subject—show higher CCSSE benchmark scores. Students enrolled in developmental education using computer-based math instruction also have higher CCSSE benchmark scores. (Benchmarks are groups of conceptually related survey items that address key areas of student engagement—and have been shown to be powerful contributors to effective teaching, learning, and student retention.)

It is important to note that average student participation rates for these practices can be misleading because of the wide variance in implementation across colleges. For example, among colleges with the lowest student participation in a developmental math course using computer-based math instruction, 4% to 19% of students participated; among colleges with the highest participation, 70% to 87% of students participated.

**English Corequisite: Participation and Outcomes**

**PARTICIPATION**

While at this college, I have enrolled in a college-level English course and a developmental English (reading/writing) course during the same academic term.

**BENCHMARK SCORES BY PARTICIPATION IN COREQUISITE ENGLISH**

<table>
<thead>
<tr>
<th>Benchmark Score</th>
<th>Participated</th>
<th>Did not participate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active and Collaborative Learning</td>
<td>53</td>
<td>49</td>
</tr>
<tr>
<td>Student Effort</td>
<td>58</td>
<td>53</td>
</tr>
<tr>
<td>Academic Challenge</td>
<td>54</td>
<td>51</td>
</tr>
<tr>
<td>Student-Faculty Interaction</td>
<td>56</td>
<td>51</td>
</tr>
<tr>
<td>Support for Learners</td>
<td>58</td>
<td>52</td>
</tr>
</tbody>
</table>

**WHO ARE THESE RESPONDENTS?**

Students who responded to the CCSSE 2015 Assessment and Placement items, took a placement test, tested into at least one developmental education course, were told they were required to or should take at least one developmental education course in their first term, and enrolled in the English course based on their placement test scores (N=27,191)
### Math Corequisite: Participation and Outcomes

**PARTICIPATION**

While at this college, I have enrolled in a college-level math course and a developmental math course during the same academic term.

![Pie chart showing 31% participation and 69% did not participate](chart)

**BENCHMARK SCORES BY PARTICIPATION IN COREQUISITE MATH**

<table>
<thead>
<tr>
<th>Benchmark Score</th>
<th>Participated</th>
<th>Did not participate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active and Collaborative Learning</td>
<td>54</td>
<td>48</td>
</tr>
<tr>
<td>Student Effort</td>
<td>58</td>
<td>53</td>
</tr>
<tr>
<td>Academic Challenge</td>
<td>54</td>
<td>51</td>
</tr>
<tr>
<td>Student-Faculty Interaction</td>
<td>56</td>
<td>51</td>
</tr>
<tr>
<td>Support for Learners</td>
<td>58</td>
<td>52</td>
</tr>
</tbody>
</table>

### Computer-Based Developmental Math: Participation and Outcomes

**PARTICIPATION**

While at this college, I have enrolled in an on-campus developmental math course that uses computer-based instruction.

![Pie chart showing 44% participation and 56% did not participate](chart)

**BENCHMARK SCORES BY PARTICIPATION IN COMPUTER-ASSISTED DEVELOPMENTAL MATH**

<table>
<thead>
<tr>
<th>Benchmark Score</th>
<th>Participated</th>
<th>Did not participate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active and Collaborative Learning</td>
<td>52</td>
<td>48</td>
</tr>
<tr>
<td>Student Effort</td>
<td>57</td>
<td>52</td>
</tr>
<tr>
<td>Academic Challenge</td>
<td>53</td>
<td>50</td>
</tr>
<tr>
<td>Student-Faculty Interaction</td>
<td>55</td>
<td>50</td>
</tr>
<tr>
<td>Support for Learners</td>
<td>56</td>
<td>52</td>
</tr>
</tbody>
</table>

### WHO ARE THESE RESPONDENTS?

Students who responded to the CCSSE 2015 Assessment and Placement items, took a placement test, tested into at least one developmental education course, were told they were required to or should take at least one developmental education course in their first term, and enrolled in the math course based on their placement test scores (N=28,847)

### WHO ARE THESE RESPONDENTS?

Students who responded to the CCSSE 2015 Assessment and Placement items, took a placement test, tested into at least one developmental education course, were told they were required to or should take at least one developmental education course in their first term, and enrolled in the math course based on their placement test scores (N=28,655)

---

“I was happy that they gave you a little pamphlet that showed you what you were going to be doing on the test.”

— Student
In fall 2016, Butler Community College (KS) plans to launch full-scale implementation of its English corequisite model, the Accelerated Learning Program (ALP). Data show that with the ALP, first piloted in spring 2013, more students complete developmental courses, and they do so more quickly. The college developed the model after faculty expressed concern over lagging developmental English success.

The ALP consists of two course pairings. The first corequisite requires students who placed into the lower level of developmental English to simultaneously enroll in the higher level of developmental English. The second corequisite requires students who placed into the higher level of developmental English to also enroll in college-level Composition I. Both corequisites are rigorous programs that involve extensive writing and college-level reading. Students who pass both classes in a corequisite pairing earn six credit hours, three for each class.

In five semesters, two ALP pilots on two Butler campuses have grown to 17 corequisite offerings at three Butler sites. When the college enacts full-scale implementation across all six campuses in fall 2016, it plans to also launch online ALP classes.

Data show that ALP students move through the developmental sequence faster and are consistently more successful than are conventional developmental English students. Analysis of data from the ongoing pilot study examined pass rates for the higher-level developmental English class among three groups:

1. Students who took the first corequisite pairing (the lower-level developmental course and the higher-level developmental course)
2. Students who placed directly into the higher-level developmental course and took it without a corequisite
3. Students who took the lower-level developmental course and the higher-level developmental course in the traditional two-course sequence prior to the pilot study (baseline comparison group)

Butler compared pass rates in two semesters: spring 2014, with 28 ALP students; and fall 2014, with 39 ALP students. The pass rates for group 2 (students who placed directly into the higher-level developmental course) were slightly higher than the pass rates for students in the corequisite class; however, the pass rates for the corequisite pairing (spring 2014, 65%; fall 2014, 69%) were almost double the pass rate for the baseline group (37%).

Analyses revealed a similar pattern of success for the college-level course among the following three groups:

4. Students who took the second corequisite pairing (the higher-level developmental course and the college-level course)
5. Students who placed directly into the college-level course and took it without a corequisite
6. Students who took the higher-level developmental course and the college-level course in the traditional two-course sequence prior to the pilot study (baseline comparison group)

The pass rates for group 4 (the ALP participants in the second corequisite pairing) in spring 2014, fall 2014, and spring 2015 (65% [N=65], 69% [N=81], and 67% [N=33], respectively) were lower than the corresponding pass rates for students who placed directly into college-level Composition I (69% [N=894], 74% [N=1,498], and 67% [N=867]). However, the pass rates for these ALP students were much higher (at least 25 percentage points higher) than the pass rate for the baseline group (39%).

“I think that they could’ve prepared us better because when you haven’t been to college or you’ve been out of college for a long period of time, all that stuff sort of escapes you.”

— Student
Faculty Members and Effective Placement

More than half of faculty members assess students’ preparedness for success in their classes at the beginning of the term. However, the use of student assessments varies among instructors: 70% of faculty who teach developmental education (either developmental courses only or a mix of developmental and college-level courses) assess their students’ preparedness for their courses, compared with 54% of faculty who teach only college-level courses.

Faculty members, though, rarely use assessment information to recommend that students be placed in another course or level. Their most frequent actions based on student assessments are to recommend tutoring to the student or to adjust their own course pedagogy.

These findings raise questions about what role faculty should play in assessment and placement—and whether students should be re-assessed and possibly placed into different courses after the initial class sessions.

Many Faculty Assess Students’ Preparedness

More Than Half of Faculty Use Early Assessments (N=4,730)

At the beginning of the current term, in your selected course section, which methods, if any, did you use to administer an in-class assessment to determine your students’ preparedness to succeed in the course?

* A written assessment, an oral assessment, an online assessment, and/or a computer-assisted assessment

Source: 2015 CCFSSE data

No assessment
(n=1,980)

One or more types of assessments*
(n=2,750)

58%

42%

Faculty Teaching Developmental Education Are More Likely to Use Early Assessments (N=4,717)

At the beginning of the current term, in your selected course section, which methods, if any, did you use to administer an in-class assessment to determine your students’ preparedness to succeed in the course?

Faculty teaching developmental courses (solely or in combination with college-level courses)

No assessment
(n=360)

One or more types of assessments*
(n=839)

70%

30%

Faculty teaching only college-level courses

No assessment
(n=1,613)

One or more types of assessments*
(n=1,905)

54%

46%

* A written assessment, an oral assessment, an online assessment, and/or a computer-assisted assessment

Source: 2015 CCFSSE data
**Faculty Assessments Do Not Often Lead to Placement Recommendations**

**Faculty Say They Do Not Often Advise Students to Change Courses (N=2,705)**

Which of the following, if any, is your most common action based on results of your in-class assessment if a student is underprepared?

<table>
<thead>
<tr>
<th>Action</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I recommend to a student that he/she use tutoring or another academic support service (n=1,337)</td>
<td>49%</td>
</tr>
<tr>
<td>I recommend to academic advising or student services that a student be placed in another course or level (n=119)</td>
<td>4%</td>
</tr>
<tr>
<td>I adjust my course pedagogy or approach (n=907)</td>
<td>34%</td>
</tr>
<tr>
<td>I advise a student to drop the course (n=50)</td>
<td>2%</td>
</tr>
<tr>
<td>Other (n=292)</td>
<td>11%</td>
</tr>
</tbody>
</table>

Source: 2015 CCSSE data

**Students Agree That Faculty Do Not Often Advise Them to Change Courses**

<table>
<thead>
<tr>
<th>Language</th>
<th>Question</th>
<th>Yes (n)</th>
<th>No (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>During the first few class sessions of an English course at this college, my instructor advised me to enroll in a higher- or lower-level course.</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>MATH</td>
<td>During the first few class sessions of a math course at this college, my instructor advised me to enroll in a higher- or lower-level course.</td>
<td>24%</td>
<td>76%</td>
</tr>
</tbody>
</table>

**WHO ARE THESE RESPONDENTS?**

Students who responded to the CCSSE 2015 Assessment and Placement items, took a placement test, tested into at least one developmental education course, were told they were required to or should take at least one developmental education course in their first term, and enrolled in the English course based on their placement test scores (N=26,652)

Students who responded to the CCSSE 2015 Assessment and Placement items, took a placement test, tested into at least one developmental education course, were told they were required to or should take at least one developmental education course in their first term, and enrolled in the math course based on their placement test scores (N=28,335)
While fine-tuning assessment and placement practices will help more students, it will only partially address the need to dramatically improve the ways colleges work with underprepared students. Too often, assessment and placement lead students into developmental education rather than college-level coursework. Further, the current design of developmental education produces too few successful students, and this high failure rate urgently needs to be fixed.

Finding solutions that will increase completion rates is difficult work that requires straightforward conversations about long-held beliefs and practices. The issues and questions raised below can help guide colleges as they continue grappling with the complex issues related to assessment, placement, and developmental education.

- **Advising for all.** Is your college making sure every student works with an advisor during the first term of enrollment to develop a course of study based on his or her academic and career goals? Is advising continuous? Is advising inescapable? Is it part of coursework?

- **Assessment preparation.** How actively does your college encourage students to prepare for placement exams? What supports do you offer to help them?

- **Multiple measures for placement.** Is your college expanding the tools it uses for placement? Is your college using multiple measures—e.g., high school GPA, courses taken in high school, etc.—so placement decisions are based on a more complete picture?

- **Identification of students’ needs for support.** Does your college’s intake process include a system for identifying the types and level of academic and non-academic support each student will need to successfully complete college-level gatekeeper courses within his or her first year?

- **Courses that are aligned with students’ academic programs.** Does your college’s placement process account for students’ areas of study? For example, does your college differentiate math pathways, which can allow more students to complete appropriate math requirements while preparing them for their chosen careers or transfer?

- **Corequisite courses.** Is your college offering students corequisite courses, those in which students concurrently enroll in a developmental class and a higher-level class?

- **Accelerated developmental education.** Has your college implemented any models of accelerated developmental education so students can move more quickly to gateway courses?

- **Scaling up.** Is your college moving toward implementing successful pilot interventions at scale?

- **Faculty members’ role.** What types of early assessments are faculty members conducting, and what should they do when a student’s placement seems inappropriate? Does your college have a policy requiring faculty to recommend a higher or lower placement for students—or even a mechanism for doing so? Are faculty trained and empowered to talk with students about placement?

- **Student-level data.** Is your college using data to track the progress of all students (part-time and full-time) to identify students who need more support? Does your institution measure the success of college-readiness efforts in terms of the number and percentage of entering students who successfully complete college-level gatekeeper courses within their first year?

Many have contributed to developing questions such as these. Most recently, a group of higher education organizations released Core Principles for Transforming Remediation Within a Comprehensive Student Success Strategy.

Visit www.ccsse.org/nr2016 to learn more about this and other resources.
Endnotes


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CCSSE, CCFSSE, and SENSE Member Colleges

For lists of CCSSE, CCFSSE, and SENSE member colleges, visit www.cccse.org.
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