PARTNERSHIP FOR COLLEGE COMPLETION

Accelerating action to close the graduation gap

March 2019

Policy Brief: Remediation Reform

Executive Summary

Developmental education, or remediation, was designed with good intentions – to help prepare students who need additional skills before taking college-level math and English. However, today, too many college students are spending valuable time and money on remedial courses they don't need, and which don't improve their likelihood of degree completion. **The problem is two-fold**: students are **over-placed** in developmental education due to unreliable and inconsistent placement measures, and most students placed in developmental education **don't complete** due to minimally effective traditional developmental course structures and delivery.

This problem is particularly acute for Black and Latino students who enroll in community college. Black and Latino students are disproportionately represented in developmental courses, and of those who enroll in developmental coursework, only 9% of Black students and 16% of Latino students will graduate, compared to 25% of their White peers. While the scale of the problem is smaller at our public four-year institutions, the disparities between white students and students of color remain.

Some colleges and universities in the state are employing developmental education reforms aimed at addressing these issues, but most students in the state are attending institutions that have been slow to change. Every year we wait to scale reforms, 60,000 more students will enroll in developmental education and few will complete. To improve outcomes for all students, the state must build on the momentum from recent K-12 reforms that aim to improve college preparedness, like the Postsecondary and Workforce Readiness Act (PWR Act), and scale evidence-based developmental reforms at every college and university in the state.

State policy should call on institutions to:

- Employ **multiple stand-alone measures for placement**, including cumulative high school GPA, to better place students in college-level courses.
- Scale co-requisite support models that place students directly into college-level
 coursework with targeted supports for students who need additional skills development,
 without delaying time to degree.

These reforms, if implemented at scale, will help the state meet projected workforce demands and ensure that all students, regardless of which Illinois institution they attend, will have a real opportunity to earn a college degree.

Background

Developmental education was designed to be a launch pad for college students who need additional skills development to prepare for college-level math and English. In traditional models of developmental education, entering college students sit for an English and math placement exam before enrolling in classes, the results of which are used to place students in either developmental or college-level coursework. Not all students are aware that a test will be administered and many do not know the repercussions the results hold. If a student does not meet the institution's prescribed cut-score, he or she is placed into developmental coursework and could be required to enroll in and complete up to three or four developmental courses in one subject area before they are permitted to enroll in college-level coursework in that subject.

Developmental courses cost students time and money, rarely count as college credit, and seldom lead to a degree. For those few students who do make it through the developmental course sequence and graduate, on average, it takes 11 additional months to earn a degree.¹ This is particularly troubling for Illinois' high school graduates attending community college, as nearly half are placed into developmental coursework.² And it's not just the students with the highest need who are placed in remediation, either. According to the most recently available public data, the average high school GPA for a Illinois high school graduate placed into remedial education is 2.75 out of 4.0.³

While several statewide reforms at the K-12 level have addressed student preparedness for college-level coursework, reforms at the college level have been piecemeal and not at scale. The relative share of students in developmental education is only decreasing by 1-2% per year for community colleges and may have actually grown over the last three years for public four-year universities, despite having thousands fewer students enrolled overall.⁴

To meet the original goal of developmental education, colleges must take the torch from the K-12 system, and scale reforms that place more college-ready students into college-level coursework and provide differentiated supports to students who need them, without delaying progress to degree. Only then will developmental coursework be an onramp to a college degree.

¹ Nguyen Barry, Mary; Dannenberg, Michael, "The High Cost of Inadequate High Schools and High School Student Achievement on College Affordability." Education Reform Now, http://educationpost.org/wp-content/uploads/2016/04/EdReformNow-O-O-P-v7.pdf, February 18, 2019.

 $^{2\ {\}rm ``Illinois\ Report\ Card.''\ Accessed\ February\ 18,\ 2019.\ https://www.illinoisreportcard.com/State.}\\ aspx?source=trends\&source2=postsecondaryremediation\&Stateid=IL.$

³ The ACT, "How well are Illinois high schools preparing students for success in Illinois postsecondary institutions?" High School-to-College Success Report. http://iccbdbsrv.iccb.org/hscollegesuccess/docs/P_20092011_14_9996_S_S_COLL-CSR_Two_Year_Institution_Composite. pdf, February 18, 2019.

⁴ Illinois Board of Higher Education, "Preliminary Fall 2018 Enrollments in Illinois Higher Education." https://www.ibhe.org/board/2018/december/I1.pdf, February 18, 2019. Illinois Board of Higher Education, "Preliminary Fall 2016 Enrollments in Illinois Higher Education." https://www.ibhe.org/assets/files/FE2016.pdf, February 18, 2019. ICCB data, 2016.

Issues

As a result of long-standing institutional practice and policy, too many college students spend valuable time, money, and state aid on remedial courses they don't need and that, even in the best-case scenario, increase time to degree. The problem is twofold: **inaccurate placement measures** over-place students into developmental education and **long course sequences** derail students, sometimes before they even really begin.

Over-Placement

Nearly 46% of Illinois' high school graduates who enroll in a community college are placed and enroll in developmental coursework in at least one subject.⁵ To place students, most institutions rely on high-stakes placement exams to assess whether an entering college student needs developmental education. However, research suggests that placement tests are not the strongest predictors of how students will perform in college.⁶ ACT or SAT tests have often been used as a placement tool, too, as they are intended to be measures of college readiness, and conveniently, many college-bound students have already taken them. Like placement tests, though, they are not as predictive as other available measures.⁷ These tests often result in too many students placed into developmental classes who could pass a gateway-level (introductory) course if given the opportunity.⁸

While institutions are often disproportionately concerned with placing under-prepared students in college-level classes for fear they will fail, research shows that over-placing students into developmental education is far more likely and more harmful than the alternative. Research suggests that 25-33% of students placed into developmental coursework could receive a B or better if placed directly into a college-level course; right now, only 17% of Illinois' students enrolled in developmental education end up completing a gateway course in math and English at all. Moreover, research from California has shown that not even the highest-need high school students are both highly unlikely to succeed in college-level courses and have their likelihood of completing these courses maximized through traditional developmental education. 11

^{5 &}quot;Illinois Report Card." Accessed February 18, 2019.

⁶ Belfield, Clive, and Peter M. Crosta. "Predicting Success in College: The Importance of Placement Tests and High School Transcripts," February 1, 2012. https://ccrc.tc.columbia.edu/publications/predicting-success-placement-tests-transcripts.html.

⁷ Hodara, Michelle, Shanna Smith Jaggars, and Melinda Mechur Karp. "Improving Developmental Education Assessment and Placement: Lessons From Community Colleges Across the Country," https://ccrc.tc.columbia.edu/media/k2/attachments/developmental-education-assessment-placement-scan.pdf.

 $^{8\} Scott-Clayton, Judith.\ ``Do\ High-Stakes\ Placement\ Exams\ Predict\ College\ Success, ``February\ 2012.\ http://www.mcca.org/uploads/fckeditor/file/8%20-%20CRC%20-%20Do%20High-Stakes%20Placement%20Exams%20Predict%20College%20Success.pdf.$

⁹ Scott-Clayton, Judith. "Do High-Stakes Placement Exams Predict College Success," n.d., 44.

¹⁰ Scott-Clayton, Judith. "Do High-Stakes Placement Exams Predict College Success," n.d., 44. Complete College America, "Corequisite Remediation: Spanning the Completion Divide" http://ccaspanning.wpengine.com/wp-content/uploads/2016/01/CCA-SpanningTheDivide-ExecutiveSummary.pdf, February 18, 2019.

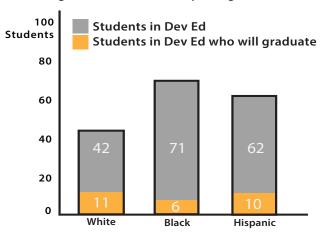
¹¹ Logue, A. W., Mari Watanabe-Rose, and Daniel Douglas. "Should Students Assessed as Needing Remedial Mathematics Take College-Level Quantitative Courses Instead? A Randomized Controlled Trial." Educational Evaluation and Policy Analysis 38, no. 3 (September 2016): 578–98. https://doi.org/10.3102/0162373716649056.

Scott-Clayton, Judith, Peter M. Crosta, and Clive R. Belfield. "Improving the Targeting of Treatment: Evidence From College Remediation." Educational Evaluation and Policy Analysis 36, no. 3 (September 1, 2014): 371–93. https://doi.org/10.3102/0162373713517935. Hayward, Craig, John Hetts, Mallory Newell, Craig Rutan, Terrence Willett, and Cabrillo College. "Understanding and Interpreting the AB 705 Adjustments," n.d., 38.

This suggests that no identifiable student group may be better served in traditional developmental education than in collegelevel courses.

Low-income students and students of color are disproportionately affected by this issue. A larger share of African-American and Latino students attend community college, relative to four-year public and private non-profit colleges, compared to white students. Among students attending community college, 62% of Latino students and 71% of African-American students are placed in remediation, compared to only 41% of white students. While this imbalance to

Number of Dev. Ed. Enrollees And Graduates By Race Among 100 Illinois Community College Students



Source: ICCB Data, 2016

some degree reflects previous educational and socioeconomic inequities, the larger point isn't where these inequities start, but how Illinois can work toward ending them. Outcomes from other states that have scaled reforms suggest Illinois can significantly improve progress toward degree completion for Black and Latino students by implementing placement reforms at the college level.¹⁴

Under-Completion

Traditional developmental education models have produced subpar and inequitable results. In Illinois, less than 20% of remediation-placed students graduate, and only 9% of African-American students, 17% of Latino students, and 16% of Pell-eligible students do so. Though the reason for developmental education's inception is intuitive, so are the basic mechanisms of its failure to produce positive outcomes for most students. Students enrolling in developmental education courses are over-selected from groups that have the most barriers toward college completion, out of a pool of community college students that likely have the smallest margins for spending more time and money taking classes. Developmental education adds to these barriers, requiring a non-standardized set of courses that often do not count toward a degree, use up student financial aid, and cost Illinois students roughly \$36 million out-of-pocket each year. 6

¹² Illinois Board of Higher Education, Databook Table I-3, Race and National Origin of Students Enrolled in Illinois Colleges and Universities by Type of Institution, Fall 2017

^{13 2016} data provided by Illinois Community College Board.

¹⁴ Florida saw the extent of over-placement in developmental education when the state made developmental education optional for most full-time students with its SB 1720 law, and the next year 4,300 additional students passed English gateway-level courses and 2,500 additional students passed math gateway-level courses. Gains were largest among African-American and Latino populations, with only slight drops in college-level course completion percentages as a whole. Hu, Shouping, Toby J Park, Chenoa S Woods, David A Tandberg, Keith Richard, and Dava Hankerson. "Investigating Developmental and College-Level Course Enrollment and Passing before and after Florida's Developmental Education Reform," n.d., 47.

^{15 2016} data provided by Illinois Community College Board.

¹⁶ Jimenez, Laura; Sargrad, Scott; Morales, Jessica; Thompson, Maggie. "The Cost of Catching Up." Center for American Progress. https://cdn. americanprogress.org/wp-content/uploads/2016/09/12082503/CostOfCatchingUp-report.pdf, September 2016.

Studies show that these developmental "obstacle course[s]" are the leakiest section of the college attainment pipeline, not because students fail, but because of the attrition that happens over time with these sequences. The Each level of developmental education adds two attrition points, enrollment in the developmental course and completion of the developmental course. For students placed in courses three levels below college-level, they have six additional points of attrition compared to students placed directly into the college-level course. This is certainly evident in Illinois, where only 35% of students who start in a developmental course end up enrolling in the subject-area college-level course the next year, and over the last 10 years 447,000 of these students have decided not to return.

Solutions

To address over-placement and under-completion, states, systems, and institutions across the country and some Illinois institutions are implementing reforms that:

- Use **multiple measures** to assess students' readiness for college-level coursework, including high school performance; and
- Place students who need additional help directly into credit-bearing courses with in-time co-requisite support.

Multiple Measures for Placement

A successful placement policy not only uses accurate measures for placement, but given the research on over-placement's harm to students, also places fewer students in developmental education. This can be done by employing a "one-and-done" multiple measures approach whereby institutions offer students a variety of ways to demonstrate competency for college-level coursework. The key to this approach, compared to other multiple measure approaches, is that it allows students to become eligible for college-level coursework by demonstrating proficiency with any one measure.¹⁹

California and North Carolina are among the states that have used legislation to ensure students are more accurately placed into college-level coursework, relaying heavily on high school performance measures. These changes were sparked by evidence that using high school performance measures, especially cumulative high school GPA, would result in less students misplaced into developmental coursework, and could help make placement more equitable.²⁰

¹⁷ Hu, Shouping, Toby J Park, Chenoa S Woods, David A Tandberg, Keith Richard, and Dava Hankerson. "Investigating Developmental and College-Level Course Enrollment and Passing before and after Florida's Developmental Education Reform," n.d., 47, available at https://www.dropbox.com/s/uivtsfb9mten9pt/Pathways_Stoup_FINAL-2.pdf?dl=0.

¹⁸ Îllinois Community College Board, "How Many Remedial Students Advance to College-Level Coursework?" Frequently Asked Questions, https://www.iccb.org/iccb/wp-content/pdfs/faqs/Remedial_Advancement_FY17.pdf. February 18, 2019. Complete College America, "Corequisite Remediation: Spanning the Completion Divide" http://ccaspanning.wpengine.com/wp-content/uploads/2016/01/CCA-SpanningTheDivide-ExecutiveSummary.pdf, February 18, 2019.

^{19 &}quot;One and Done." Multiple Measures. Accessed February 18, 2019. https://www.rfamultiplemeasures.org/policy-types/one-and-done/.
20 Scott-Clayton, Judith, Peter M. Crosta, and Clive R. Belfield. "Improving the Targeting of Treatment: Evidence From College Remediation." Educational Evaluation and Policy Analysis 36, no. 3 (September 1, 2014): 371–93. https://doi.org/10.3102/0162373713517935.

Cumulative GPA is perhaps better defined itself as a multiple measure, as it is the product of many assessments by different teachers over a long period of time and a variety of challenges, both cognitive and non-cognitive.²¹ Moreover, research from the University of Chicago confirms GPA is valid regardless of what high school a student comes from, and that high grades even at lower-performing schools are consistent measures of student ability.²²

Moving away from high-stakes tests is another step toward better placement. Studies have shown that placement tests are less predictive than high school measures, too often resulting in a high error rate.²³ That placement tests are only weakly correlated with college performance is not surprising given their duration and narrow focus.²⁴ Newer measures, such as the ALEKS test, which are being administered at a few colleges in the State, have less research on their effectiveness, with some case studies claiming gains in placement accuracy and others showing similar lack of predictive accuracy for course performance.²⁵

The Illinois Council of Community College Presidents (ICCCP) recenty approved recommendations for placement that encourage all of Illinois' 48 public colleges to employ a multiple measures placement model. While many colleges are starting to implement ICCCP's recommendations, the recommendations are not mandatory, do not require institutions to use high school GPA as a placement measure, and do not disincentize placement exams. While these are a step in the right direction, placement reforms should be comprehensive and statewide if they are to significantly decrease the number of students who are over-placed into developmental education and ensure students who can succeed in college-level courses are given that opportunity.

Key legislative solutions to improve placement:

- Provide students multiple opportunities to demonstrate proficiency for college-level coursework
- Use high school measures, including cumulative high school GPA, as individually qualifying measures
- Limit the use of placement tests for placement into developmental education

²¹ Geiser, Saul, and Maria Veronica Santelices. "Validity of High-School Grades in Predicting Student Success Beyond the Freshman Year," n.d., 35. https://files.eric.ed.gov/fulltext/ED502858.pdf

²² Roderick, Melissa, Matthew Holsapple, Kallie Clark, and Thomas Kelley-Kemple. "From High School to the Future: Delivering on the Dream of College Graduation," n.d., 51. https://consortium.uchicago.edu/sites/default/files/publications/FHSttF%20Delivering%20on%20 the%20Dream-Nov2018-Consortium.pdf.

²³ Scott-Clayton, Judith. "Do High-Stakes Placement Exams Predict College Success," February 2012. http://www.mcca.org/uploads/fckeditor/file/8%20-%20CCRC%20-%20Do%20High-Stakes%20Placement%20Exams%20Predict%20College%20Success.pdf.
24 Ibid.

²⁵ Reddy, Alison Ahlgren, and Marc Harper. "Mathematics Placement at the University of Illinois." PRIMUS 23, no. 8 (July 1, 2013): 683–702. https://doi.org/10.1080/10511970.2013.801378. Mourad, Roger; Nguyen, Lan. "Analysis of ALEKS Placement Test." Institutional Research and Analytics Washtenaw Community College. http://www.miair.org/documents/presentations/20181121162712UseOfADecisionTheoryModelForValidatingMathCoursePlacementTest.pdf.

Co-Requisite Remediation

To address under-completion among students enrolled in developmental coursework, states, systems, and institutions are implementing co-requisite support models that help students gain competency in math and English without delaying degree completion.

With co-requisite support, students enroll directly into college-level coursework and receive academic support alongside their regular classes. Often, the additional support takes the form of a curriculum-aligned course or lab, but there is variation in current models. Instead of multi-layered developmental course sequences, students get up to speed while earning credit towards their degree. This approach follows research that shows that direct or shorter paths to gateway courses produce better outcomes, even for students that score lowest on placement tests.²⁶

There have been many waves of implementation of co-requisite models, and they have been proven effective compared to traditional developmental education in many studies over the last decade.²⁷ Students in Tennessee, Georgia, Indiana, New York, and California, to name a few examples, are succeeding in introductory college-level math and English courses at significantly higher levels than before implementation of co-requisite models. Gaps in college-level course completion between white students and students of color are closing in these states, and more students are now progressing toward degree completion.²⁸

Illinois has experienced similar gains as a result of a recent co-requisite remediation pilot led by Complete College America. Available data on the eight-institution pilot show 70-80% of students completing their gateway course in just one year after implementation, compared to just 39% of students at the pilot colleges even *advancing to take* these courses.²⁹ Four-year universities saw similar results, with more than a 50% increase in college-level course completion in one case, and co-requisite students actually outperforming the average student who had been placed directly into the college algebra class.³⁰ As a result of this pilot and other initiatives across the state, hundreds of additional students are completing college-level coursework in one academic year.

²⁶ Xu, Di, and Mina Dadgar. "How Effective Are Community College Remedial Math Courses for Students With the Lowest Math Skills?" Community College Review 46, no. 1 (January 1, 2018): 62–81. https://doi.org/10.1177/0091552117743789. Hayward, Craig, John Hetts, Mallory Newell, Craig Rutan, Terrence Willett, and Cabrillo College. "Understanding and Interpreting the AB 705 Adjustments," The RP Group

http://rpgroup.org/Portals/0/Documents/Projects/MultipleMeasures/Webinars/AB705_Adjustments_Webinar_Final.pdf. February 18, 2019. 27 "The Data Already Tell Us How Effective Co-Requisite Education Is (Opinion)." Accessed February 18, 2019. https://www.insidehighered.com/views/2018/07/17/data-already-tell-us-how-effective-co-requisite-education-opinion.

²⁸ Complete College America, "Corequisite Remediation: Spanning the Completion Divide" http://ccaspanning.wpengine.com/wp-content/uploads/2016/01/CCA-SpanningTheDivide-ExecutiveSummary.pdf, February 18, 2019. Logue, Alexandra W, Daniel Douglas, and Mari Watanabe-Rose. "Three-Year Effects of Corequisite Remediation With College-Level Statistics," n.d., 40. Office of the Vice Chancellor for Academic Affairs. "Co-requisite Remediation Pilot Studey – Fall 2014 and Spring 2015 and Full Implementation Fall 2015." Tennessee Board of Regents. available at https://www.insidehighered.com/sites/default/server_files/files/TBR%20CoRequisite%20Study%20-%20Update%20 Spring%202016%20(1).pdf. Accessed February 18, 2019.

²⁹ Illinois Community College Board, "Co-Requisite in Illinois," available at http://www2.iccb.org/co-requisite/wp-content/docs/Co-Req_presentation_with_correct_template-092118.pdf. Accessed February 19, 2019.

³⁰ Becker, Ashley; Julian, Aimee. "Co-Requisite Models in Illinois." Illinois Community College Board. https://icsps.illinoisstate.edu/wp-content/uploads/2017/01/Co-%E2%80%93-Requisite-Models-in-Illinois.pdf. Accessed February 18, 2019.

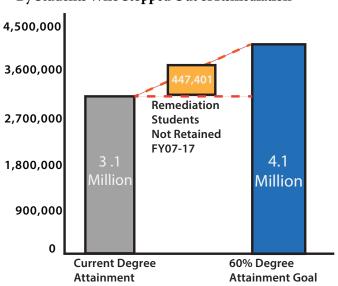
Key legislative solutions to improve progress to degree:

- Scale co-requisite support for most students placed into developmental education
- Provide state appropriations for implementation and professional development
- Include reporting requirements to support evaluation and adaptation

Potential Impact

To keep pace with projected workforce demands, Illinois has set a goal that 60% of adults in Illinois hold a highquality degree or credential by 2025. 4,500,000 While the state has made progress toward this goal, we must improve 3,600,000 acceleration at all momentum points, including getting more students to and through college-level math and English. 2,700,000 More than a million Illinois community college students have been placed in 1,800,000 developmental education over the last ten years, and 447,400 students stopped out without getting a chance to attempt college-level coursework; if students were better placed and supported by evidencebased practices, much of the gap between the state's current attainment rate and the 60% goal could be closed. By

Nearly Half the 60x25 Attainment Gap Could Be Filled By Students Who Stopped Out of Remediation



Source: ICCB and American Community Survey Data

reforming traditional remediation, we can help more students stay on-track to on-time degree completion and make a statewide push to meet the demands of an ever-increasing global economy.

But, every year without action, 60,000 more students in Illinois will be enrolled in developmental education courses, more than 31,000 of whom are Pell-eligible, 18,000 who are Hispanic/Latino, and nearly 13,000 who are African-American.³¹ Under current models of remediation, compared to co-requisite remediation, an estimated 4,000 fewer students will complete gateway English courses and about 6,000 fewer students will complete gateway math courses every year.³² Of the 60,000 students who enroll in developmental education, less than 19% will graduate.

^{31 2016} data provided by Illinois Community College Board.

 $^{32\} http://ccaspanning.wpengine.com/wp-content/uploads/2016/01/CCA-SpanningTheDivide-ExecutiveSummary.pdf$

Without immediate statewide action, our equity gaps in college completion will be slow to close, hundreds of thousands of dollars in state financial aid will go to waste, and thousands of students will start college with little hope of completing.

Illinois' co-requisite support pilot demonstrated the positive impact these reforms could have in course completion for students if scaled statewide, and national data backs this up.³³ The Illinois Community College Board and Illinois Board of Higher Education have committed to improving developmental education and issued important guidance to move this work, and many institutions have started this work on their own accord.³⁴ Absent a funded statewide commitment, however, change will continue to be incremental and compete with other state and institutional priorities. By moving all public institutions to better place students into college-level coursework and providing differentiated supports to students who need them, developmental education can truly become a path to a college degree.

³³ Logue, Alexandra W, Daniel Douglas, and Mari Watanabe-Rose. "Three-Year Effects of Corequisite Remediation With College-Level Statistics," n.d., 40. Office of the Vice Chancellor for Academic Affairs. "Co-requisite Remediation Pilot Studey – Fall 2014 and Spring 2015 and Full Implementation Fall 2015." Tennessee Board of Regents. available at https://www.insidehighered.com/sites/default/server_files/files/TBR%20CoRequisite%20Study%20-%20Update%20Spring%202016%20(1).pdf. Accessed February 18, 2019.

³⁴ Becker, Ashley; Julian, Aimee. "Co-Requisite Models in Illinois." Illinois Community College Board. https://icsps.illinoisstate.edu/wp-content/uploads/2017/01/Co-%E2%80%93-Requisite-Models-in-Illinois.pdf. Accessed February 18, 2019. Illinois Community College Board, "Illinois Co-Requisite Implementation Guide." available at http://www2.iccb.org/co-requisite/wp-content/docs/Implementation_Guide-101818.pdf. October 2018.

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