

FOURTH YEAR *SOPHOMORES?*



Improving Remedial Student
Outcomes in Illinois

The Challenge

Fifty-one percent of first-time community college students in Illinois take remedial or developmental classes when they enter college before they can start college-level coursework.¹ They take these classes for many reasons—perhaps because they’ve forgotten material they once knew, perhaps because they are not adequately prepared for college—but they have one thing in common: they are less likely to graduate from college. At some schools, full-time students may add another two to three years onto their two-year associate’s program, making graduation much less likely. Only 14 percent of developmental students end up graduating within three years.²

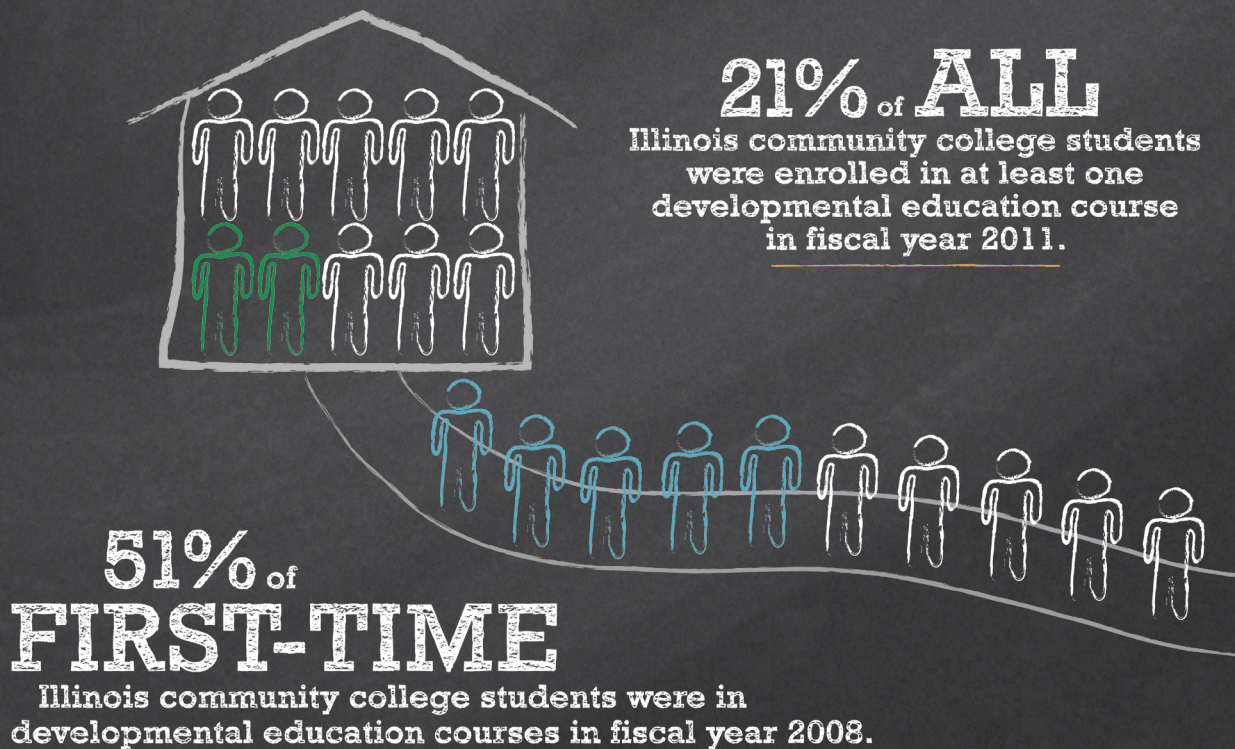
Ignoring the problem is simply not an option. A growing number of jobs require some form of post-secondary education, making college necessary for most Illinoisans.³ Developmental education must keep

up with the widening demand for higher education, ensuring students can get the skills they need to succeed in college and the workplace.

Our current system needs work, but there are bright spots—colleges that are revamping developmental education and having success. Following their lead, we can make our system efficient and effective, targeting the right students and making sure they develop the skills they need for the next level of coursework as quickly as possible.

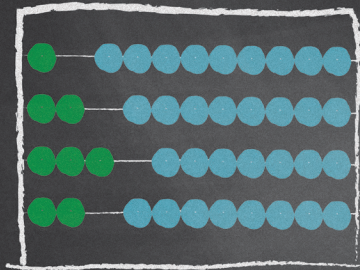
If we fail to meet this challenge, a growing number of students, especially low-income and minority students, will continue to waste money they do not have on degrees they don’t complete. Illinois can’t afford to lose these students.

Who’s enrolled in developmental ed?¹



WE NEED TO FOCUS ON THE RIGHT STUDENTS

Changes to math courses will have a big impact¹



Of all Illinois community college students enrolled in developmental education,

82%

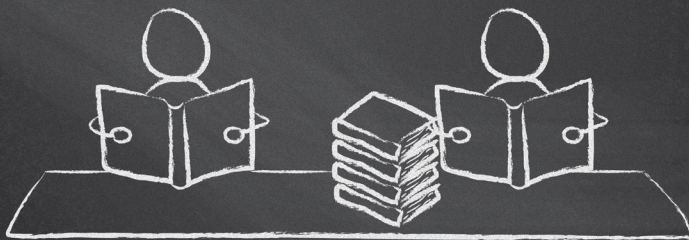
were in at least one developmental math course.

56%

were enrolled only in developmental math.

Community college students bear an extra burden⁹

They are
11% more likely



to be required to take developmental education than similar 4-year college students.

Over the years, the need for developmental education has increased in Illinois, with the greatest demand in math. Developmental education can improve student performance in college-level courses, particularly for students who have low skill levels.⁴ Yet, while developmental education is essential for many, it can have a detrimental effect on higher-scoring students.⁵ Because these courses make the road to graduation longer and costlier, it is essential to ensure that only students who need developmental education take it. Unfortunately, several studies suggest that many students are placed in developmental education who don't belong.

» *Placement tests overestimate student need.*⁶ In most schools, students are placed into developmental education courses based on placement test scores. However, in multiple large studies, the results of placement tests have either not accurately predicted college grade point average (GPA) or completion or have led to severe misplacement of students.⁷ High school GPA was more predictive of college performance than both of the major placement tests used by most community colleges.

This may be due in part to the fact that few prospective students are aware of the importance of placement tests and most fail to prepare. In addition, placement methods and required scores vary widely among Illinois community colleges, meaning that some schools may be greatly overestimating the need for developmental education.⁸

» *Community college students are 11 percent more likely to be required to take developmental coursework than four-year public or private college students, regardless of academic skill and family background.*⁹ Given that around 50 percent of Illinois undergraduates attend community college, Illinois may be significantly overestimating the actual number of students who need developmental education.¹⁰

» *Black students are also 11 percent more likely to take developmental courses than white students with identical academic skills, preparation, economic backgrounds, and college type.*¹¹ With 44 percent of Illinois' black college students at community colleges, our existing system may be overestimating the skills gap and inadvertently requiring black students to jump through additional hoops before graduation.¹²

Overestimating the number of students who need developmental education sets us up for failure.

THE STATUS QUO:

Long developmental education sequences can turn a two-year program of study into four or five years.

NEXT STEPS



IMPROVE PLACEMENT POLICIES TO ENSURE THE RIGHT STUDENTS ARE IN DEVELOPMENTAL EDUCATION



What Colleges Can Do:

- » Align testing standards with the Common Core and Partnership for Assessment of Readiness for College and Careers (PARCC) guidelines.
- » Implement additional non-test placement measures such as previous high school or college GPAs.
- » Ensure new students understand the importance of placement tests and allow them to prepare for tests ahead of time.
- » Provide refresher workshops or courses and allow for retesting.



State Policy That Would Encourage Widescale Change:

- » Establish a smaller range of placement test cut-off scores that is consistent with the Common Core and PARCC, but allows for differences among institutions.
- » Develop basic standards that encourage placement based on more measures than a single test.

What's Working Now: Reducing the Number of Students Who Need Developmental Education

William Rainey Harper College has worked closely with local high schools to better align high school standards with college expectations. As a result, the school has decreased the number of recent high school graduates needing remediation in mathematics by 12 percent and decreased the number of students in lower-level developmental courses by 33 percent. This initiative includes administering the college placement test in the junior year of high school and using the results to encourage students to take additional math coursework through their high school or the college in their senior year.

Sauk Valley Community College piloted a small summer bridge in 2012 for adult education students and recent high school graduates. Over eight weeks, a group of students met twice a week for two and a half hours and were required to complete six hours of homework outside of class. Three out of four students were able to score high enough when the placement test was administered at the end of the program to skip developmental coursework.

A VISION FOR THE FUTURE:

Illinois can lead the nation in graduating large numbers of low-income and minority students. Fewer students will need developmental education and those that do will gain transferable skills quickly, enter their chosen programs of study quickly, and graduate with high skill levels that are in demand with employers.

FOR ILLINOIS



REDUCE OPPORTUNITIES FOR STUDENTS TO DROP OUT



What Colleges Can Do:

- » Enroll higher-scoring developmental students in college-level coursework and a coordinated developmental course or required tutoring simultaneously.
- » Reduce levels of developmental education by coordinating curriculum content across departments to ensure that adult education and developmental coursework is not duplicative and is well-aligned with the skills needed to pass gatekeeper courses.
- » Identify additional college-level coursework developmental education students can take while completing their developmental coursework to reduce time to degree.
- » Require developmental students to meet with an advisor twice a semester.



State Policy Changes That Would Enable These Changes:

- » Provide a higher reimbursement rate for cutting-edge programs that reduce time to degree for developmental students.
- » Include developmental student course completion, gatekeeper completion, and transfer or graduation in the state longitudinal data system and provide focused reports to help colleges make decisions about what is working.

What's Working Now: Shortening the Pipeline and Supporting Student Success

Kishwaukee College began piloting embedded tutors in 2001 and continues to increase the number of classes with tutors. Skilled math students are recruited as paid tutors. During the semester, tutors take notes to share, circulate to answer questions, hold office hours, and help instructors identify concepts that need clarification. Around 20 percent of developmental algebra sections include embedded tutors. Students in these courses are about 20 percent more likely to complete the course than those in classes without tutors.

Sauk Valley Community College was able to cut one level of developmental education after they reviewed course outlines and found duplicative content and course objectives between the levels.

Rend Lake College has tracked developmental student progress over four years to assess which practices most improved student outcomes. The number of students completing a degree or certificate increased after the college added in-class tutors to developmental English and math. Tutors receive training in instruction and tutoring and meet weekly with students referred by instructors. Although it is difficult to make a direct correlation, after tutors joined classrooms, developmental students who graduated or remained enrolled increased by 10 percent and program completion increased by nearly nine percent.



FOCUS ON THE SKILLS STUDENTS NEED FOR THEIR CAREER PATHS



What Colleges Can Do:

- » Engage students in career exploration when they first express interest in the college and encourage students to select a career grouping, such as liberal arts or social sciences, very early on.
- » Contextualize curricula by integrating career-related skills into developmental courses.
- » Replace long, algebra-focused developmental sequences with a six-credit statistics-focused course for social science, business, and liberal arts students.
- » Create developmental bridge programs for very low-skilled students who need additional preparation.



State Policies to Expand the Impact of Local Pilots:

- » Set a state-wide standard replacing long developmental math sequences with a four- to six-credit developmental course for non-STEM students and a developmental bridge program for very low-skilled students.
- » Make geometry requirements in the Illinois Articulation Agreement policies more consistent with state statute, which allows geometry to be one of several math options required for admission into state universities.

What's Working Now: Making Developmental Education Relevant to Career Interests

Through the Illinois Community College Board's I-CAPS program, **Lewis and Clark Community College** provides contextualized study skills courses paired with Automotive Technology, Welding, and Emergency Medical Technician (EMT) courses to current adult education and developmental students and recent General Equivalency Degree (GED) earners. Career and Technical Education and Basic Skills instructors plan and co-teach the course. Course completions average around 77 percent. In addition to I-CAPS, the college offers two bridge programs: Bridge to Health Sciences and a new Bridge to Technology, for adult education and developmental students. Completers of bridge programs enroll in college at a rate of 85 percent.

Parkland College provides contextualized curricula and cohort-based learning for developmental students interested in pursuing careers in business, criminal justice, and health professions. Most of the pilot cohorts attend a developmental English class, developmental reading class, student success course, and a major course in a structured schedule. With the exception of the health professions cohort, these students are much more likely to pass developmental reading and English courses. African-American males in a similar community are completing developmental courses at higher rates and are more likely to complete a college-level course and earn 15 college credits by their second semester than their counterparts.

What's Working Now: Shortening the Pipeline & Building Needed Math Skills

Students in the **Rock Valley College** Mathematical Literacy for College Students (MLCS) course learn needed math skills quickly, increasing the number who pass and halving their time in developmental coursework, without diminishing performance in college-level coursework. The MLCS curriculum is aligned with the Common Core, and faculty use common syllabi and final exams. The six-credit course helps students master skills necessary for success in statistics and liberal arts math in one semester, instead of multiple semesters of developmental algebra. This allows developmental students to more quickly begin coursework related to their program of study.

After reviewing developmental student progress data, the **Parkland College** Math Department created a six-credit sequence to prepare non-STEM students for college math. Each of the two modules takes eight weeks, so students can repeat in the same semester, if needed. The more intensive developmental sequence for the Business and STEM tracks has also been divided into four eight-week modules. The new curricula include new pedagogy to help students build problem-solving and collaborative skills employers seek. Even with one of the toughest professors, 90 percent of students in the initial pilot passed. The college is working to expand the program in Fall 2013.

WE CAN DECREASE TIME TO DEGREE AND INCREASE OUR STUDENT SUCCESS RATE

Students who select a program of study and concentrate on related coursework early are more likely to complete college.²² However, multiple semesters of developmental education make it harder for students to do so. While students with very low reading, writing, and math scores may need more than one developmental course to succeed in college, thousands of other students may be stuck on developmental math treadmills that don't relate to their concentrations and make it harder to complete.²³

It doesn't have to be that way. Illinois has already made gains in aligning high school coursework with college standards and improving developmental course completion. Recent changes to developmental math policy support new curricula that prepare non-STEM students for math related to their concentrations. A growing number of Illinois colleges are testing new methods in developmental education, and local

and national data point the way to practices that work. We can make a difference.

However, the scope of the problem requires coordinated effort. Many colleges in Illinois are working hard to improve developmental student outcomes, but most efforts are small pilots that impact a small percentage of developmental students. Colleges often spend time creating new curricula and programs, instead of building off the work of other colleges. Working together to coordinate pilots, share lessons learned, and advocate for necessary policies, we can make sure the students who need help get the right skills faster.

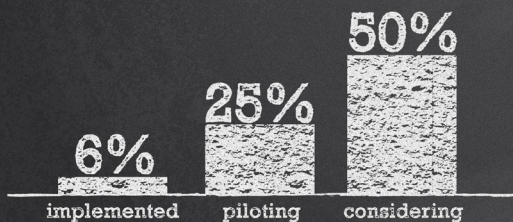
We need to coordinate across colleges and expand existing efforts to meet the scope of the problem.

State of the State: What's happening in Illinois?

In a recent Women Employed survey, all 16 responding community colleges* had made some change to their developmental education program. The most popular change was introducing computer-based labs, homework, or tutoring.

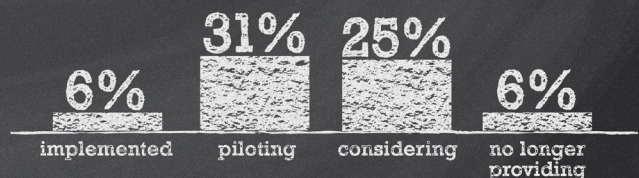
But implementation of many promising practices varies widely across the state.

Contextualized Developmental Education



1 in 4 colleges don't require developmental education students to meet with an advisor or counselor.

Co-Enrollment in a College-Level Course with a Support Course



*One third of Illinois community colleges responded to this survey.

Illinois has a strong network of colleges and committed college leaders. However, with such a large number of students in developmental education, small programs scattered around the state won't get the job done. Working together we can make our developmental education system more efficient and effective, helping students get the skills they need to succeed.

ACKNOWLEDGEMENTS

Written by Meegan Dugan Bassett with help from Women Employed staff and support from the Working Poor Families Project, with special thanks to Deborah Rabia Povich and Brandon Roberts. Thanks to Diana Robinson, Brian Durham, Nathan Wilson, Amanda Corso, Michael Baumgartner, and Davis Jenkins for providing their invaluable assistance. Very special thanks to the many college administrators and faculty that answered our questions, including but not limited to: Judith Marwick, Thomas Pulver, Medea Ramage, Kathy Almy, Robert Cappetta, Chris Kuberski, Linda Chapman, Val Harris, Jason Evans, Pam Lau, Geoffrey Griffiths, Jerry Weber, Rich Haney, Roberta Christie, Keven Hansen, Myra Snell, Laurie Hoecherl, Leanne Brooks, Lisa Tavitas, and others like them who work hard to help students every day.

- ¹ Illinois Community College Board. (2012). *Developmental Education Data Brief*. Springfield, IL: Illinois Community College Board. Unpublished.
- ² Complete College America. (2011). *Illinois 2011*. Washington, D.C.: Complete College America. Retrieved December 2012 from: <http://www.completecollege.org/docs/Illinois.pdf>.
- ³ Hilliard, Tom. (2012). *Graduating to College: Three States Helping Adult Education Students Get a College Education*. The Working Poor Families Project. Retrieved July 2013 from: http://www.workingpoorfamilies.org/wp-content/uploads/2012/10/policybrief-summer2012_2.pdf.
- ⁴ Bettinger, Eric P. & Bridget Terry Long. (2005). *Addressing the Needs of Under-prepared Students in Higher Education: Does College Remediation Work?* (Working Paper 11235). Cambridge, MA: National Bureau of Economic Research; Boatman, Angela & Bridget Terry Long. (2010). *Does Remediation Work For All Students? How the Effects of Postsecondary Remediation and Developmental Courses Vary by Level of Academic Preparation*. (Working Paper). New York, NY: National Center for Postsecondary Research, Teachers College, Columbia University.
- ⁵ Boatman, Angela & Bridget Terry Long. (2010). *Does Remediation Work For All Students? How the Effects of Postsecondary Remediation and Developmental Courses Vary by Level of Academic Preparation*. (Working Paper). New York, NY: National Center for Postsecondary Research, Teachers College, Columbia University.
- ⁶ Burdman, Pamela. (2012). *Where to Begin: The Evolving Role of Placement Exams for Students Starting College*. Boston, MA: Jobs for the Future; Conley, David. (2012). *A Complete Definition of College and Career Readiness*. Eugene, OR: Educational Policy Improvement Center; Conley, David. (2007). *Redefining College Readiness*. Eugene, OR: Educational Policy Improvement Center; Hughes, Katherine L. & Judith Scott-Clayton. (2010). *Assessing Developmental Assessment in Community Colleges: A Review of the Literature*. (Working Paper No. 19). New York, NY: Community College Research Center, Teachers College, Columbia University.
- ⁷ Hughes, Katherine L. & Judith Scott-Clayton. (2010). *Assessing Developmental Assessment in Community Colleges: A Review of the Literature*. (Working Paper No. 19). New York, NY: Community College Research Center, Teachers College, Columbia University; Belfield, Clive & Peter Crosta. (2012). *Predicting Success in College: The Importance of Placement Tests and High School Transcripts*. (Working Paper No. 42). New York, NY: Community College Research Center, Teachers College, Columbia University; Geiser, Saul & Roger Studley. (2002). *UC and the SAT: Predictive Validity and Differential Impact of the SAT I and SAT II at the University of California*. *Educational Assessment*, 8(1), 1-26; Geiser, Saul & Maria Veronica Santelices. (2007). *Validity of High-school Grades in Predicting Student Success Beyond the Freshman Year: High-school Record vs. Standardized Tests as Indicators of Four-year College Outcomes*. Berkeley, CA: Center for Studies in Higher Education, University of California, Berkeley.
- ⁸ Illinois Community College Board Developmental Education Advisory Council. (2010). *Summary Report Survey of Math Placement Practices in Illinois Community Colleges*. Springfield, IL: Illinois Community College Board. Unpublished.
- ⁹ Parker, Tara L. et al. (2010). *Remedial and Developmental Education Policy at a Crossroads*. Boston, MA: Policy Research on Preparation Access and Remedial Education; Attewell, Paul et al. (2006). *New Evidence on College Remediation*. *Journal of Higher Education*, 77(5), 886-924.
- ¹⁰ Illinois Board of Higher Education. (2011). *Table 1-2: Total Fall Enrollments by Gender, Race, or National Origin, Type of Institution, and Level of Instruction, Fall 2010*. Retrieved May 2013 from <http://www.ibhe.org/Data%20Bank/DataBook/2011/Table%201-2.pdf>.
- ¹¹ Attewell, Paul et al. (2006). *New Evidence on College Remediation*. *Journal of Higher Education*, 77(5), 886-924.
- ¹² Illinois Board of Higher Education. (2011). *Table 1-2: Total Fall Enrollments by Gender, Race, or National Origin, Type of Institution, and Level of Instruction, Fall 2010*. Retrieved May 2013 from <http://www.ibhe.org/Data%20Bank/DataBook/2011/Table%201-2.pdf>.
- ¹³ Cullinane, Jenna & Philip Uri Treisman. (2010). *Improving Developmental Mathematics Education in Community Colleges: A Prospectus and Early Progress Report on the Statway Initiative*. (Working Paper). Paper presented at the National Center for Postsecondary Research Developmental Education Conference, New York, NY; Handel, Michael J. (2010). *What Do People Do at Work? A Profile of U.S. Jobs From the Survey of Workplace Skills, Technology, and Management Practices (STAMP)*. Boston, MA: Northeastern University.
- ¹⁴ Geoffrey Griffiths, personal communication, April 26, 2013.
- ¹⁵ Cullinane, Jenna & Philip Uri Treisman. (2010). *Improving Developmental Mathematics Education in Community Colleges: A Prospectus and Early Progress Report on the Statway Initiative*. (Working Paper). Paper presented at the National Center for Postsecondary Research Developmental Education Conference, New York, NY.
- ¹⁶ Carnegie Corporation of New York & Institute for Advanced Studies. (2009). *The Opportunity Equation: Transforming Mathematics and Science Education for Citizenship and the Global Economy*. New York, NY: Carnegie Corporation of New York & Institute for Advanced Studies.
- ¹⁷ Illinois Community College Board. (2012). *Annual Student Enrollments and Completions in the Illinois Community College System Fiscal Year 2011*. Retrieved December 2012 from <http://www.iccb.org/pdf/reports/11enrollmentrpt.pdf>; Illinois Community College Board. (2009). *Annual Student Enrollments and Completions in the Illinois Community College System Fiscal Year 2008*. Retrieved December 2012 from <http://www.iccb.org/pdf/reports/08enrollmentrpt.pdf>.
- ¹⁸ Illinois Community College Board. (2012). *Developmental Education Data Brief*. Springfield, IL: Illinois Community College Board. Unpublished.
- ¹⁹ Complete College America. (2012). *Remediation: Higher Education's Bridge to Nowhere*. Washington, D.C.: Complete College America.
- ²⁰ Complete College America. (2011). *Time is the Enemy*. Washington, D.C.: Complete College America.
- ²¹ Illinois Community College Board. (2012). *Illinois Community College System Complete College America Progress Report*. Retrieved March 2013 from http://www.iccb.org/pdf/reports/cca2012/Combined_CCA_June2012.pdf.
- ²² Jenkins, Davis & Sung-Woo Cho. (2012). *Get with the Program: Accelerating Community College Students' Entry into and Completion of Programs of Study*. (CCRC Working Paper No. 32). New York, NY: Community College Research Center, Teachers College, Columbia University.
- ²³ Bailey, Thomas R. (2009). *Challenge and Opportunity: Rethinking the Role and Function of Developmental Education in Community College*. *New Directions for Community Colleges*, 145, 11-30.



Women Employed

65 E. Wacker Place, Suite 1500
Chicago, IL 60601
312-782-3902

womenemployed.org