

NextDev Challenge: Statewide Remedial Education Redesign

The following brief is based on an online event hosted by the Education Commission of the States' Getting Past Go remedial education project, which is funded by Lumina Foundation. The [NextDev Challenge](#) solicited a wide range of program ideas that could improve student outcomes in developmental education. This statewide redesign brief is one of four produced as part of the NextDev Challenge and is intended to highlight innovative policies and strategies aimed at helping underprepared students achieve their postsecondary goals.

Georgetown University Center on Education and the Workforce estimates that more than 60% of all new jobs will require some postsecondary education by 2018.¹ President Obama and organizations such as Lumina Foundation are urging states to set robust college completion goals to ensure that citizens are adequately prepared to meet these workforce needs. States are realizing that low success rates among remedial education students could threaten the attainment of their college and workforce goals.

Data from Complete College America, for example, reveal that fewer than one in 10 community college students enrolled in developmental education will graduate within three years.² As states become more aware of these statistics and promising institutional efforts, they are undertaking comprehensive, evidenced-based initiatives to reform developmental education. This brief highlights initiatives in Colorado and West Virginia, both of which submitted their remedial education reform strategies to the NextDev Challenge.

Colorado

The Community College System of Colorado, in association with the Department of Higher Education, has embarked on a large-scale effort to transform developmental education. The initiative is partially supported by a \$1 million grant from Complete College America and the Bill and Melinda Gates Foundation.

A developmental education task force was established to review the current system and propose recommendations to significantly improve student outcomes. The redesign effort involves all 13 community college campuses and addresses every aspect of the remediation process, including assessment, delivery, course sequencing, and K-12 alignment.



Process

The overarching goal of Colorado's developmental education reform plan is to accelerate students' progress into college-level coursework. The task force's recommendations center on the following key principles:

- ✦ Successfully move students through remediation and into college-level courses within two semesters
- ✦ Use comprehensive assessment practices
- ✦ Offer curricular pathways that align with students' field of study
- ✦ Scale successful accelerated, modularized, and compressed delivery methods
- ✦ Develop alternative math sequencing pathways for non-STEM students.

The task force piloted several initiatives that utilize multiple innovative strategies for instructional delivery, as well as how students are assessed for course placement. As a result of the pilot and additional information, the task force developed recommendations for reform, which can be found at <http://www.ccs.edu/developmental-education/index.html>.

Elements

Seven innovations are currently being implemented at 12 of the 13 community college campuses:³

- ✦ **Open Entry/Exit Math Labs:** Self-paced developmental courses in which students also receive tutoring support
- ✦ **Mainstreaming:** Students testing right below the cut scores on placement exams enroll in college-level coursework with a supplemental, one-credit remedial skills course
- ✦ **Accelerated and Compressed Options:** Remedial courses are scheduled to allow students to complete the requirements faster than in a traditional sequence (some courses will be compressed; others will be taught concurrently in the same semester)
- ✦ **Contextualization:** Delivery and assessment of basic skills is embedded within the context of program content, often geared toward a specific career
- ✦ **Modularization:** Developmental math curriculum is redesigned into stand-alone modules that can be completed in different combinations
- ✦ **Diagnostic Assessment:** More precise exams isolate students' specific skill needs to determine assignment to remedial, college-level, or mainstreaming courses
- ✦ **Online Hybrid Courses:** Institutions deliver traditional developmental course formats with online elements and tutoring support.

Preliminary results

While much overlap exists among the seven innovations that Colorado's community colleges are pursuing, preliminary evaluations have centered on four innovation clusters:

- ✦ Open Entry/Exit Math Labs
- ✦ Accelerated, Compressed, Contextualized, Mainstreaming
- ✦ Online hybrid
- ✦ Modularization and Diagnostic Assessments

Colorado officials note that it is too early to tell which innovations will be the most successful at propelling students through remedial sequences and increasing retention rates. Preliminary data show, however, that students placed in accelerated, compressed, contextualized, mainstreaming clusters have shown improved grades and retention compared to other models. While there was no difference in rates of course completion, students enrolled in the accelerated cluster showed significantly higher GPA results than the control groups.⁴ Implementation is ongoing and officials stress that there is insufficient data "available to robustly investigate each institution separately" at this time. Colorado plans to identify and implement the most promising delivery models across the community college systems by 2014.

West Virginia

West Virginia aims to dramatically increase its number of college degree holders through a statewide redesign of developmental education. Higher education officials say the state will need an additional 20,000 degree-holders by 2018 to adequately meet workforce needs. West Virginia will fall short of attaining these goals without significant changes to developmental education. In 2011, 67% of two-year college students required remediation, and of those only 12.5% completed an associate's degree in four years.⁵

A developmental education task force was created to review the system and recommend specific strategies to improve student success. The task force agreed to statewide implementation of several innovations including: common competencies for developmental math, English, and reading; co-enrollment remedial education; and modularized, accelerated math courses. Higher education officials say that approximately 70% of institutions in West Virginia have begun to implement the reforms.

Process

Like Colorado, West Virginia was one of 10 states awarded a \$1 million grant from Complete College America and the Bill and Melinda Gates Foundation to aid in the state's Developmental Education Initiative. The Community and Technical College System and the Higher Education Policy Commission have invested the resources into professional development to help implement the accelerated and co-enrollment models. The overarching goals of the redesign initiative include: increasing the number of West Virginians with a high-quality degree, shortening time to degree, and improving the alignment between developmental education and students' field of study.

Elements

A subcommittee of the developmental education task force suggested that institutions should choose from a menu of best-practice innovations based on their size, resources, and student needs.⁶ The subcommittee developed general recommendations for delivery methods and also for three levels of student proficiency. For example:

Modularization:

- ✦ Modularized math courses would be designed based on the skills needed for particular degree/credential programs. Students would enroll only in the modules required for their program of study.
- ✦ Modules should be self-paced and students would have the opportunity to complete them in one semester.
- ✦ Faculty will deliver course content face-to-face and online.

Acceleration and Co-enrollment:

- ✦ When possible, institutions should blend reading and writing courses. Students should have the opportunity to move through developmental writing and English composition in the same semester.
- ✦ Students scoring in the higher ranges of remediation should have the opportunity to enroll in fast-track courses or modules that cover developmental-level instruction and the subsequent college-level course.

Contextualization:

- ✦ Students would be placed in a college-level career/technical course with embedded contextualized developmental instruction and mandatory supplemental skills course.

Learning Communities:

- ✦ Students placed in the lower levels of remediation would be assigned to a developmental education learning community with mandatory supplemental instruction, college success instruction, writing or math lab instruction, extra computer-assisted instruction, and advising.

Results

Higher education officials say they are still in the midst of evaluating the Developmental Education initiative. Quantitative and qualitative data are being collected to analyze success rates in both developmental and subsequent college-level courses. According to West Virginia's timeline, the new modular and co-enrollment accelerated courses will be piloted, evaluated, and implemented at selected institutions by August 2013. Those course results will be analyzed again with the most successful models being implemented statewide the following year.⁶ Preliminary data reveal that student success appears to have improved over traditional course formats, and that student and faculty satisfaction is positive.

Conclusion

The statewide developmental education reform efforts in Colorado and West Virginia involve collaboration from multiple stakeholders, including policymakers, state higher education agencies, postsecondary system officials, and faculty. The initiatives also are supported, in part, by outside funding. West Virginia is leveraging the funds to advance a multi-pronged, centrally coordinated approach to increase degree attainment among underserved students. In addition, Colorado cites the years-long establishment of a state policy environment that is receptive to innovative change as a key factor in getting the remedial redesign plans off the ground.

In the past few years, an increasing number of states and postsecondary systems have undertaken comprehensive strategies to redesign developmental education. These efforts are necessary and laudable but not without challenges; among them: replication, evaluation, and sustainability of innovative models. Therefore, it will be essential for those invested in the reforms to share effective policies, research findings, and lessons learned at institutions and postsecondary systems—within and beyond their states.



Background

In 2006 the Tennessee Board of Regents (TBR) commenced a statewide redesign of developmental math education to improve success rates for students and reduce instructional costs. The TBR collaborated with the National Center for Academic Transformation (NCAT) to redesign the curriculum and implement innovative strategy models.

The project, funded through a FIPSE grant, laid the groundwork for a new systemwide policy for delivering developmental education instruction. The policy includes the use of proven instructional strategies, articulation of specific math and English competencies, greater alignment between high school and postsecondary curricula, and accelerated options for students to complete developmental education in one semester. Remediation is outcomes-based with documented competencies used to demonstrate college readiness. (See, [Guideline A-100: Learning Support](#))

Five of the 13 community colleges and one of six universities in the TBR system piloted the redesign of developmental education as follows:

- ✦ Austin Peay University replaced traditional developmental math courses using the **Structured Learning Assistance (SLA) Model**. The model allows students to mainstream into college-level math courses that align with their major, while receiving supplemental academic support.
- ✦ Cleveland State Community College, Jackson State Community College, and Chattanooga State Community College piloted the **emporium model** to redesign developmental math. Each institution used instructional software to facilitate mastery learning of five math competencies identified by faculty as being required for success in college-level math courses.
- ✦ Northeast State Technical Community College and Columbia State Community College piloted a redesign for the remediation of reading and writing using technology to enhance student engagement and learning.

Results: The project demonstrated significant improvements on several indicators, including: completion of developmental education competencies, retention, enhanced learning, course rigor, and success in college-level courses. Further, institutions are beginning to see a positive impact on graduation rates. There has been a corresponding reduction in per-student remedial cost borne by institutions, ranging from 20% to 50%.

Available data from the statewide initiative showed significant student improvement at several colleges.

- ✦ Following the redesign at Cleveland State, student performance in three math courses improved by 10 percentage points or more. Before implementation the average score in Elementary Algebra was 70.3%, compared to 84.1% post-implementation.
- ✦ Jackson State reported that following the redesign, students increased average post-test scores in all courses by 15 points. The average score for traditional courses was 73%, compared to 88% in the redesigned modular course.
- ✦ At Northeast State Technical College, traditional course scores averaged 81%, compared to 86% following the redesign.⁷
- ✦ Austin Peay State University combined two math courses into one, semester-long course in 2007-2008. Since then, course enrollments have increased by 40% and completion rates by 30%. (Provided by the Tennessee Board of Regents)

Statewide Implementation: As of fall 2013, all 19 TBR institutions will have implemented a developmental education redesign that is in compliance with the new systemwide policy. The positive results have prompted course redesigns in college-level general education and major courses.

The revised policy for developmental education in the TBR system establishes a continuous improvement process that provides flexibility in delivery but requires increased accountability for student success and retention and for efficient use of resources. Developmental education best practice will continue to evolve as more data are made available and the varied approaches are analyzed and shared.

Endnotes

- 1 Anthony P. Carnevale, Nicole Smith, and Jeff Strohl, *Help Wanted: Projections of Jobs and Education Requirements through 2018* (Washington, D.C.: Georgetown University Center on Education and the Workforce, June 2010), <http://cew.georgetown.edu/jobs2018/>, (accessed May 20, 2013, p.13).
- 2 *Remediation: Higher Education's Bridge to Nowhere* (Washington, D.C.: Complete College America, April 2012, p.2), http://www.completecollege.org/state_data/ (Executive Summary: <http://www.completecollege.org/docs/CCA-Remediation-summary.pdf>), (accessed May 20, 2013).
- 3 *Complete College Colorado Evaluation*, prepared by JVA Consulting, LCC, for the Colorado Department of Higher Education and the Colorado Community College System (Denver, Colorado, September 2012).
- 4 Ibid.
- 5 *Higher Education Report Card 2011*, (Charleston, WV: West Virginia Higher Education Policy Commission and the West Virginia Community and Technical College System, 2011, p. 53), https://www.wvhepc.org/downloads/LOCEA/Report_Card_2011.pdf, (accessed May 20, 2013).
- 6 West Virginia Developmental Education Task Force Best Practices Subcommittee Recommendations (Charleston, West Virginia, April 2011) http://meshdevsite.com/wp_test/wp-content/uploads/Dev-Ed-Best-Practices-Subcommittee-Recommendations-April-29-2011.pdf, (accessed on May 17, 2013).
- 7 Carol A. Twigg, *Tennessee Board of Regents: Developmental Studies Redesign Initiative, Improving Learning and Reducing Costs A Summary of Project Outcomes* (Saratoga Springs, NY: National Center for Academic Transformation) <http://www.thencat.org/States/TN/TN%20Outcomes%20Summary.htm>, (accessed on May 17, 2013).

Resources

Colorado's Developmental Education Task Force
<http://www.ccs.edu/developmental-education/index.html>

West Virginia's Developmental Education Initiative
<http://wvdeved.com/>

Tennessee Developmental Education Policy: Guideline A-100, Learning Support
<http://www.tbr.edu/policies/default.aspx?id=6746&terms=Learning%20Support>

Please check out the NextDev Challenge website to review the summaries and evidence for the programs highlighted in this brief. Select Read and then search on the program title or institution. <http://gettingpastgo.edthemes.org/>

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Getting Past Go is an initiative of the Education Commission of the States (ECS), funded by Lumina Foundation, that works with state and postsecondary education leaders to increase the success of college students who are placed in remedial education.