An overview of how Colorado collaboratively redesigned its system to be on the leading edge of America’s movement to increase the number of developmental education students succeeding in college and careers.

A state government-championed initiative of CCCS with funding from Complete College America and the U.S. Department of Labor.

www.cccs.edu/developmental-education/
Annually, the Colorado Community College System serves over 40,000 students with one or more Developmental Education (DE) courses. These students are placed in their institution’s DE program when assessments indicate they are not ready for college-level learning. Historically, DE programs have required students to spend up to two years becoming proficient with the English, Reading and Math skills that are taught in high school.

As America began its journey toward dramatically increasing its number of college graduates, data indicated very few community college developmental education students ever completed a certificate or degree or transferred to a baccalaureate-granting institution. Moreover, less than one-quarter of the students who started in the lowest remedial English, Reading and Math courses at their institution were completing their college’s DE program. An analysis of data relating to the problem found that the longer it takes students to complete DE courses, the less likely they are to complete a degree/certificate or credential.

During the past decade, a national dialogue on the effectiveness of DE has emerged. State departments of education and legislative bodies across the nation have charged community colleges to reduce the amount of time, credits, and costs associated with DE while increasing their college completion rate. With the needs of our students as our top priority, the CCCS rose to this challenge.

In collaboration with the Colorado Department of Higher Education, CCCS leadership convened and supported a taskforce of 35 college DE leaders to review/analyze how policy/practice could be soundly reformed to increase student success. In redesigning the existing paradigm, they used data-informed, evidence-based, best practices that had demonstrated effectiveness locally and nationally.

Through a “bottom-up” process, they incorporated innovative/successful strategies into their work. To remove barriers to student success, they reduced the costs, credits-required and time-to-complete associated with Colorado’s DE programs.

In summary, they not only accelerated the curriculum, but redesigned it so it was no longer tied to what students were supposed to learn in high school; instead, the curriculum would be driven by what students needed to learn to be successful in gateway college courses. Finally, they devised a comprehensive faculty/staff support program to ensure the redesign succeeded.
A recent Community College Research Center Brief stated, “The more levels of developmental courses a student needs to go through, the less likely that student is to ever complete college English or Math.” Consequently, shortening the time it takes students to complete developmental education increases the likelihood they will earn a degree, certificate, or transfer. Importantly, national research was incorporated into this redesign of DE. Proven practices piloted over six years at CCCS institutions were also integrated into the redesign. By combining what has worked best nationally with what has proven successful close to home, the taskforce has designed a system that is expected to significantly increase the numbers of developmental education students who complete college-level courses and eventually complete certificates, degrees or transfer.

**Evidence Supporting Redesign**

**Student Experience Before and After**

**Before**

Under the old system, it could take students two years or more to complete a college’s developmental education program before they could attempt college-level courses. For instance, students testing in the lowest remedial level of Math had to complete four courses (13 credits over four semesters).

All students had to prepare to take College Algebra.

Support services designed to assist developmental education students throughout their time at a community college were not mandated.

**After**

All students testing into developmental Math and English will get the opportunity to enroll in 100-level college English and Math courses within two semesters or less. Many students can begin such college studies immediately. To permit this, such students are concurrently supported by labs/support courses that correspond to the college course(s) they are taking.

Depending on which credential/career students are pursuing, students will be advised to take algebra, statistics, or career math courses that are relevant to their academic and career goals.

Intentional student support services are provided to developmental education students along the continuum of all their coursework. As such, colleges are helping students identify career pathways to engage them in the process of completing an academic program that will prepare them for their job goal.
Each college is integrating strategies that address planning for success, initiating success, and sustaining success for developmental students using effective student support strategies. Specifically, to address barriers to student success, retention, and completion, colleges are using strategies such as: academic advising, career coaching, case management, orientation, goal setting and academic planning, prohibiting late registration, first year experience, student success courses, tutoring, supplemental instruction, and/or other data informed best practice tactics.

CCCS colleges will provide students with access to academic success strategies, college readiness skills, and career counseling designed to help them through their accelerated developmental education coursework.

The Colorado Community College System Developmental Education Redesign is a multi-year initiative that has reengineered the state’s developmental education process. Specifically: the curricula was reworked, adapted and enhanced; the anticipated time for students to complete their remedial studies was accelerated; and a new diagnostic assessment system is under development.

All of these measures are being implemented to increase the number of students who successfully complete each college’s developmental education program and then enroll and succeed in gateway college-level courses. Such an increase is helping CCCS achieve the goal of increasing each college’s number of degree and certificate earners as well as transfer students. This initiative is also instituting enrollment-to-completion student support services for these students. The services are designed to engage them in completing academic programs that correspond to their career goals.

Increasing the numbers of Coloradans benefiting from college coursework not only helps meet the skilled-workforce needs of business and industry, it also prepares our citizens to earn higher wages. These greater earnings are then returned to local economies while improving the quality of life of students and their families. To ensure the continued success of this program, we will continuously monitor and improve it using relevant outcomes metrics.

The Colorado Community College System developmental education redesign initiative was funded by Complete College America and a Trade Adjustment Assistance Community College and Career Training grant from the U.S. Department of Labor.
Colorado’s community colleges will offer the following accelerated and integrated model that provides students with the opportunity to enroll in a 100-level class no later than their second term in enrollment.

**Soft Landing**
Colleges may offer a non-credit option for students who test at the lowest remedial levels to prepare them to reassess. Method of delivery is an institutional decision and may include, but is not limited to, referral to Adult Basic Education programs or assessment preparation programs that lead to reassessment for placement.

**CCR 092**
Integrated reading and writing across the disciplines. Prepares students for college-level courses.

**CCR 092 + Lab (CCR 091)**
Integrated reading and writing across the disciplines with a co-requisite lab. Colleges may enroll students who test at the medium remedial level directly in CCR with a co-requisite lab experience. This course is designed to be a one semester experience that prepares students for college-level courses.

**CCR 093 Studio “D” (Discipline-related)**
An integrated reading and writing lab for students needing modest remediation concurrently taken with and adapted to co-requisite 100-level courses within one or more of four discipline strands. Such strands are discipline-specific content that prepare students for four groups of Guaranteed to Transfer (GT) courses. These GT groups include: Communication, Arts and Humanities, Social Sciences, and Science, depending on the student’s completion goals.

**CCR 094 Studio 121**
A co-requisite integrated reading and writing support lab for students only needing modest remediation taken concurrently with ENG 121.

**PLACEMENT AND TRANSITION**
If students have passed any 100 level course in the four discipline strands or ENG 121, they will have also completed their CCR developmental course requirements.
Colleges will offer remedial students pathways to help them succeed in their 100-level Math courses. Students will choose their path based on their career or major area of interest. Students should receive advising to help them choose the appropriate path and initial math course for their career and/or transfer goals.

**Assessment Prep and Skill Refresher**
Students who test at the lowest remedial levels of math should be offered non-credit options for refreshing their skills and improving their Assessment score, which might include, but are not limited to, referral to Adult Basic Education programs or skill refresher programs that prepare students to reassess and increase their placement scores.

**Quantitative Literacy (MAT 050)**
Students who test at the medium to high remedial level of math and are interested in taking a 100-level non-Algebra or non-Transfer math course should enroll in Quantitative Literacy. Successful completion of Quantitative Literacy meets the pre-requisite requirements for non-algebra transfer courses (leading to programs such as History, Sociology, etc.) as well as non-transfer courses in career and technical programs. Some students who have successfully completed Quantitative Literacy may wish to change to an Algebra pathway. These students may enroll in the Algebraic Literacy course to continue their program.

**Algebraic Literacy (MAT 055)**
Students who test at the medium to high remedial level of math, who are interested in taking a 100-level Algebra course, should enroll in Algebraic Literacy. This course includes only content necessary for success in MAT 121 and MAT 123.

**Algebraic Literacy Lab (MAT 025)**
Students who test below the Algebraic Literacy placement score may enroll in MAT 055 as long as they co-enroll in the Algebraic Literacy support lab.

**Applied Quant Lab (MAT 091)**
Students who test at the high remedial level of math may enroll in MAT 103, 107, 108, 109, or 112 as long as they co-enroll in the Applied Quant support lab.

**Quant Lab (MAT 092)**
Students who test at a high remedial math level may enroll in MAT 120, 135, 155, or 156 as long as they co-enroll in the Quant lab for support.

**Algebra Lab (MAT 093)**
Students who test at a high remedial math level may enroll in MAT 121 or MAT 123 as long as they co-enroll in the Algebra support lab.

**THE DEVELOPMENTAL MATH REDESIGN**
A state government-championed initiative of the Colorado Community College System with funding from Complete College America and the U.S. Department of Labor.

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