



# Addressing Inequity: Expanding Access To College-Level Courses For High School Students

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## Introduction

High schools are offering ever more college-level courses to their students. Educators intend for these courses to give students a head start on their postsecondary education and increase the chance that they will earn a postsecondary credential. However, not all students have access to these courses.

The College and Career Readiness Expansion (CCRE) project is an effort to increase the number of high school students ready for college and/or career. Led by Columbus State Community College, in partnership with Jobs for the Future and the Educational Service Center of Central Ohio, the initiative focuses on students who are economically disadvantaged or are members of racial or ethnic groups underrepresented in college. A core component of the project was expanding access to college-level courses, particularly for those target populations.

CCRE has more than doubled the percentage of economically disadvantaged students and underrepresented students taking dual-enrollment courses in the Columbus area. This brief describes the impacts of this project and highlights the strategies that Columbus State and partner schools used to expand access.

### Understanding Dual Enrollment 3

What are dual-enrollment courses, and how can they help students? 3

Who takes dual-enrollment courses? 3

### Impacts of CCRE on Course-Taking 3

What is CCRE? 3

What were the CCRE impacts on dual-enrollment course-taking? 4

### Strategies to Expand Access 5

Understanding and using data 5

Developing students' awareness of and interest in college courses 6

Supporting students' college readiness 7

Providing students with dual-enrollment courses and pathways 8

### Providing Support For Students Taking College Courses 9

### Removing Barriers To Eligibility 10

### Considerations 11

## Understanding Dual Enrollment

### What are dual-enrollment courses, and how can they help students?

Dual-enrollment courses are college-level courses available to high school students through a postsecondary institution. Students can take these courses at the college campus, online, or at their high school. The college approves instructors who meet faculty criteria for all courses. Students who pass a class earn credits that can be transferred to a postsecondary institution.

Research has shown that taking dual-enrollment courses benefits students in several different ways. First, students start to see themselves as college students, which may change their post-high school plans. Second, students get exposure to college expectations, which can help them learn how to navigate more rigorous coursework.<sup>1</sup> Third, earning college credit in high school can save students money if they apply credits to their program of study and graduate with a postsecondary degree more quickly. Finally, some studies have found that students who take dual-enrollment courses are more likely to enroll in college after high school and have better postsecondary performance.<sup>2</sup>



### Who takes dual-enrollment courses?

Despite its advantages, enrollment in dual-enrollment courses is not distributed equitably. Researchers have documented that specific populations of high school students are less likely to have access to college-level courses, including students who are economically disadvantaged or who are members of certain racial and ethnic groups underrepresented in college (including Black, Hispanic/Latino, and Native American students).<sup>3</sup> In some cases, schools with high numbers of economically disadvantaged students are less likely to offer college-level courses; however, economically disadvantaged students and underrepresented students are less likely to be enrolled in college-level courses, even in schools that offer them.<sup>4</sup>

## Impacts of CCRE on Course-Taking

### What is CCRE?

CCRE was a five-year research project funded by the U.S. Department of Education. The project was based on the early college model, which emphasizes dual-enrollment opportunities combined with broader school changes to enhance students' postsecondary readiness. Schools participating in CCRE focused on restructuring their practices to better ensure student readiness for college and career. One of the project's core goals was to increase the number of students taking college-level courses, with an emphasis on expanding access for historically underrepresented populations. Columbus State piloted the program in local schools with highly diverse student populations. For example, 57% of CCRE students were considered economically disadvantaged compared to 48% of students statewide in Ohio, and 46% of students in CCRE schools identified as a member of an underrepresented racial and ethnic group compared to 23% of students in Ohio public high schools.

Additionally, CCRE schools focused on changing instruction,

<sup>1</sup> Edmunds, J. A., Arshavsky, N., Lewis, K. C., Thrift, B., Unlu, F., & Furey, J. (2017). Preparing students for college: Lessons learned from the early college. *NASSP Bulletin*, 101(2), 117-141.

<sup>2</sup> Allen, D., & Dadgar, M. (2012). Does dual enrollment increase students' success in college? Evidence from a quasi-experimental analysis of dual enrollment in New York City. *New Directions for Higher Education*, 158, 11-19; An, B. P. (2013). The influence of dual enrollment on academic performance and college readiness: Differences by socioeconomic status. *Research in Higher Education*, 54, 407-432.

<sup>3</sup> Pierson, A., Hodara, M., & Luke, J. (2017). Earning college credits in high school: Options, participation, and outcomes for Oregon students (REL 2017-216). Retrieved from Washington, DC: <http://ies.ed.gov/ncee/edlabs>

Xu, D., Fink, J., & Solanki, S. (2019). College acceleration for all? Mapping racial/ethnic gaps in Advanced Placement and dual enrollment participation. CCRC Working Paper, No. 113. Retrieved from New York: <https://ccrc.tc.columbia.edu/publications/ccrc-advanced-placement-dual-enrollment-access.html>

<sup>4</sup> Education Trust. (2020). Inequities in advanced coursework: What's driving them and what leaders can do. Retrieved from Washington, DC: <https://edtrust.org/resource/inequities-in-advanced-coursework/>



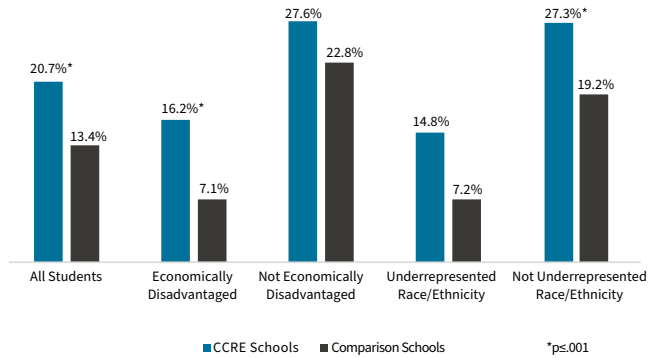
increasing students' readiness for postsecondary opportunities, expanding supports for students, and implementing course pathways. [Find more information about the project in the final report.](#)

The SERVE Center<sup>5</sup> at the University of North Carolina at Greensboro studied CCRE using a rigorous, quasi-experimental design. We matched CCRE schools to non-CCRE schools in Ohio with similar demographics and academic characteristics; both treatment and comparison schools started with similar college course-taking levels. The evaluation also collected data on implementation through surveys, interviews, and three rounds of site visits to six schools. At the end of years three and four of CCRE, we compared college-level course-taking<sup>6</sup> for the two groups of schools.

### What were the CCRE impacts on dual-enrollment course-taking?

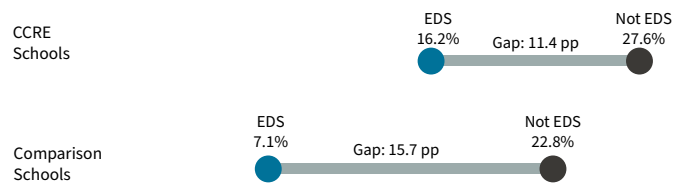
For the 2018–19 and 2019–20 school years combined, 20.7% of 10th–12th graders in CCRE schools enrolled in dual-enrollment courses, compared to 13.4% of students in non-CCRE schools, a statistically significant difference. Results showed strong positive impacts on economically disadvantaged students (EDS); the rate shows positive impacts, particularly on economically disadvantaged students; the rate of economically disadvantaged students taking dual-enrollment courses in CCRE schools was more than double the rate in comparison schools.

### CCRE had the highest impact on economically disadvantaged students (10th–12th graders)



Both sets of schools saw a smaller, not statistically significant, difference for students who were not economically disadvantaged. This is essentially equivalent to an additional 1,150 economically disadvantaged students taking dual-enrollment courses in the treatment schools. The figure above also shows that CCRE schools had doubled the enrollment rates for students in racial and ethnic groups underrepresented in higher education in dual-enrollment courses when compared to non-CCRE schools.

### Gaps between economically disadvantaged students (EDS) were smaller in CCRE schools than comparison schools

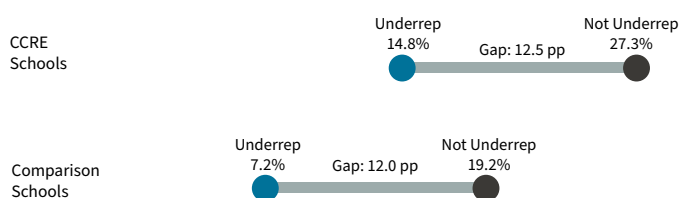


<sup>5</sup>SERVE Center at the University of North Carolina at Greensboro [serve.uncg.edu](http://serve.uncg.edu)

<sup>6</sup>In the impact study, we looked at both Advanced Placement and dual enrollment as two different ways of earning potential college credit when students are in high school. For purposes of this brief, we focus only on dual enrollment.

For example, there was a 10.5-percentage point course-taking gap between economically disadvantaged students and non-economically disadvantaged students in CCRE schools (27.6% minus 16.2%), compared to a 15.7-percentage point gap in non-CCRE schools between the same groups of students (22.8% minus 7.1%). Although CCRE had positive impacts on underrepresented students, it did not reduce the gap for this population. The gap between minority and non-minority students was essentially the same in both CCRE and comparison schools: 12.5 percentage points in CCRE schools (or 27.3% minus 14.8%) and 12.0 percentage points in comparison schools (19.2% minus 7.2%).

More underrepresented students were taking courses but the gap remained similar.



CCRE aimed to expand access to historically underrepresented populations, and the trends seen in the CCRE project run counter to national data. In the U.S., dual-enrollment expansion is primarily occurring among non-minority and non-economically disadvantaged students.<sup>7</sup> How has CCRE “bucked the trend” and begun to address issues of inequity?

## Strategies to Expand Access

Columbus State and the participating high schools worked collaboratively to expand access for historically underrepresented populations by: 1) understanding and using data; 2) increasing students’ awareness of college courses and their importance; 3) supporting students’ college readiness; 4) providing students with access to college courses and course pathways that could lead to industry-recognized credentials, stackable certificates, and/or degrees; 5) embedding support for students taking college classes; and 6) removing eligibility barriers. Because the

evaluation assessed only the project’s overall impact, the evaluation team was unable to determine the relative impact of each of the strategies on expanded access. However, these are strategies that any school should consider to increase student enrollment in college-level courses.

## Understanding and using data

A key lesson learned from the project was the importance of reviewing data and understanding the academic achievement of underrepresented students in a district. Columbus State and its partners engaged the districts in data analyses that focused on equity. For example, Columbus State provided college-level course participation data by race and ethnicity. The Educational Service Center provided coaching to the schools to make sense of their data. According to an ESC staff member, “Every single one of the districts is much better at diagnosing equity issues.” One district staff member described how their work has evolved over the course of the project:

It’s really now evolved into being more explicit with our minority and underrepresented populations and creating an advising system that really is targeting students based on their college-and career-readiness indicators and data. ... So we’re not having general conversations now; we’re being very explicit.

A goal of the project was to develop systems that would allow schools to track students’ college and career readiness. The hope was to integrate college- and career-readiness indicators into any systems the schools had for identifying students experiencing challenges. This proved difficult for many districts; however, at least two were able to develop and implement systems to track students’ college readiness (see College Readiness Early Alert in South-Western box for an example, next page).

One school used a data-based advising strategy from Equal Opportunity Schools.<sup>8</sup> Students were given a survey with a series of questions to measure characteristics like resilience and grit. Staff members identified students who scored highly in these areas but were not taking college courses. Many of those identified were students of color and economically

<sup>7</sup> Pierson, Hodara & Luke (2017).

<sup>8</sup> [eoschools.org](http://eoschools.org)

## College-Readiness Early Alert in South-Western

Prior to the CCRE project, South-Western City School District’s early alert system involved synthesizing data from five or six different sources into an Excel spreadsheet. Then, according to a district staff member, “We’d have to do all the voodoo that it required to, kind of, make sense of it.”

During the project, they revamped their system by using Tableau to integrate the data and create a series of dashboards that would allow the district to identify students who were at risk or who needed acceleration. With the impetus of the CCRE project, South-Western also incorporated college and career readiness indicators, taken from research by David Conley and the Bill & Melinda Gates Foundation. According to district staff, “The dashboards are broken down by grade level, seven through 12, and they each have different components, some overlapping ... of college and career readiness indicators.” The dashboards help school staff look at a variety of indicators, such as students who might be earning As and Bs in AP courses but only getting a 1 or 2 on the exam.

The district has provided training to building leadership teams on how to access and use the data effectively.

disadvantaged students. The counselors then had individual conversations with each identified student to discuss the opportunity to take college-level courses.

### Developing students’ awareness of and interest in college courses

Expanding access to college-level courses requires students to be interested in and see the relevance of these courses. CCRE schools spent time ensuring that students have a vision for their life after high school, what we call a “future orientation.” This approach includes an emphasis on planning for both college and career. As one staff member said, the project was designed to “benefit the student and family beyond high school.” One school talked to their students regularly about what they call “The Three Es” (see box, next page). Schools often engaged in typical college-orientation-building activities such as campus visits and college-awareness days to create this future orientation. Find more detail on how schools created a future-oriented culture in a separate brief on the topic ([include link](#)).

Advisors—from both the high schools and from Columbus State—also helped build students’ awareness of dual-enrollment courses and their impact on students’ postsecondary education. Many schools and counselors used career-advising software, such as Naviance, to help students identify their career interests and develop a plan. Most of the CCRE schools partnered with a college-access program called I Know I Can (IKIC).<sup>9</sup> This organization provided college and career counseling supports to students in their schools and supplemented the high school counselors’ work. One student described how their IKIC counselor helped them understand more about college:

*I know for college stuff, we’re so fortunate to have the I Know I Can people come in. Because before—my brother graduated in 2017—and they didn’t have those resources. He didn’t know any of the college stuff; he didn’t know how to apply. So, he just ended up not going to college at all.*

<sup>9</sup> [iknowican.org](http://iknowican.org)

## The Three E's

Hamilton Township High School encouraged students to focus on at least one of three pathways post-high school— enrollment, employment, or enlistment . This Three Es framework drives the work of the school, with consistent messaging to staff, students, and their families. The school has focused on expanding their dual-enrollment course offerings, growing their industry credential offerings and partnerships with local employers, and also building relationships with military recruitment staff

Some schools also made broad announcements about the availability of dual-enrollment courses. One school gathered all ninth-graders in the auditorium to hear about the dual-enrollment opportunities in their school. Another school took a more targeted approach, meeting with specific groups of students identified from their data.

### Supporting students' college readiness

The CCRE project team recognized that the goal of enrolling more students in college-level courses required that more students be prepared for those courses. As a result, CCRE schools undertook a variety of strategies to increase students' college readiness.

The CCRE program emphasized high school classroom instruction as a meaningful contributor to student college and career readiness. Professional development and coaching focused on student-centered strategies intended to enhance students' ability to think and communicate effectively. Some of the schools, including those in one district that saw large performance gains over the grant period, focused on six strategies that were part of a *Common Instructional Framework* identified by Jobs for the Future.<sup>10</sup>

<sup>10</sup> <https://www.jff.org/resources/common-instructional-framework/>

These strategies are:

- **Collaborative group work:** Students work in planned groups on meaningful tasks;
- **Writing to learn:** Students engage in frequent, low-stakes writing activities;
- **Scaffolding:** Students connect prior knowledge and experience with new information and ideas;
- **Questioning:** Teachers ask questions that deepen student discourse and help students analyze their thinking;
- **Classroom talk:** Students have numerous opportunities to talk about what they are learning; and
- **Literacy groups:** Students are placed in structured groups to engage with complex texts.

Some schools found that computer software programs, such as ALEKS<sup>11</sup> or Achieve3000,<sup>12</sup> helped improve students' readiness. Use of these programs was intended to build students' literacy and math skills, bringing them up to grade level. They also helped students pass placement exams required to enroll in college courses in Ohio. These programs, along with other college-readiness activities, were sometimes used during advisory periods. In one school, all ninth-graders had a 30-minute daily advisory period, during which students worked on academic readiness and executive function skills.

To build college readiness, most schools offered a college success course that students could take for college credit. Columbus State provided a class, COLS 1101, that they adapted for high school students, and some high schools further customized the course for their students. Two of the site-visit schools offered COLS 1101 for college credit and made it available to all interested 10th-graders. Another district had almost all their ninth-grade students take a course titled *College and Career Readiness*, with a district-developed curriculum built on the COLS 1101 curriculum. Overall, this course had a dual role in expanding access: 1) it was intended to improve students' ability to be successful in college courses; and 2) it could provide students access to college credits.

<sup>11</sup> [aleks.com](http://aleks.com)

<sup>12</sup> [achieve3000.com](http://achieve3000.com)





### Providing students with dual-enrollment courses and pathways

Ensuring that college courses were available to students was an essential part of the project. In the CCRE high schools, dual-enrollment courses were structured in three primary ways. First, students could take college courses on the Columbus State campus. Second, students could take college-level courses on the high school campus taught by an adjunct college faculty member, usually a high school teacher who met the Columbus State qualifications. Third, the college course could take the form of a facilitated course. In the facilitated course setting, students enrolled in a regular high school course (e.g., Chemistry) and would also participate in an online college course with additional assignments and exams. The high school teacher served as a facilitator, answering questions and facilitating the college curriculum. The Columbus State faculty member was the teacher of record for the college course, setting the coursework and curriculum. These varying structures meant schools could find a strategy that worked for their students. For example, high schools could use the facilitated model if they did not have any teachers with the necessary credentials.

As described above, many schools also offered the COLS 1101 course for college credit. Even if this was the only college-level class students took, it allowed students to dip their toes in the college waters. It also allowed them to become familiar with college expectations and procedures, such as the Blackboard course management system, interacting with college faculty, and the level of rigor of college assignments. A district coordinator believed that this course was a way of expanding access by providing students with a relatively low-stakes postsecondary opportunity.

Although expanding college course offerings was a goal of the project, the aim was not to have students take only one course or take isolated courses—what sometimes is called “random acts of college credit.” Instead, CCRE schools were expected to implement dual-enrollment courses as part of a pathway. The purpose of these pathways was to ensure that students’ dual-enrollment courses helped them progress toward educational or career goals. According to the project team, pathways: 1) included a thoughtful sequence of courses that span multiple years; 2) potentially led to an industry-recognized credential, certificate, and/or degree; and 3) aligned to an area of workforce need that will provide students with sustainable opportunities after high school. Implementing these pathways in schools was challenging





and took time, with Columbus State providing technical assistance. By the end of the project, each participating district had planned at least one pathway, with districts in varying stages of implementation. The box shows sample pathway topic areas.

## Pathways

Pathways were usually composed of a set of aligned high school and college courses with some including work-based learning opportunities, such as internships. Sample pathways in CCRE schools include:

Software Development	Marketing
Web Development	Pre-Nursing
Allied Health	Pre-Engineering
Business Management	Sterile Processing

## Providing Support For Students Taking College Courses

When more students began taking college courses, the number of students needing supplemental supports also increased. A Columbus State staff member noted that it was vital that the supports are proactive: “Pushing out the supports rather than waiting for them to come to you is, I think, really, really important. Students don’t know when they need help a lot of times; they just don’t.” The college and high schools used several strategies to provide supports to these students. For example, Columbus State provided dedicated advisors to the schools. These advisors helped students select and register for courses and provided academic support to students taking college courses.

Columbus State also provided high schools with access to the College’s early alert system, Starfish.<sup>13</sup> College instructors were expected to enter student performance data into the

system. When students hit a pre-specified threshold, such as a number of days absent or assignments missed, the system triggered an alert sent via email to the student and the instructor. For dual-enrollment courses, the alert was also sent to a school-level contact, usually a counselor. The counselor was then able to follow up with the student about academic or attendance concerns. A high school counselor described how the system worked:

I get an email and, if I log into Starfish, I can also view all of those alerts. For example, right now, I got an alert from an English professor for a student that [had a] participation concern, attendance concern, class completion concern—and all for the same student. That student has [health challenges]. So, knowing that they’re struggling in the class and might not be able to attend class for a while, I reached out to [the Columbus State advisor] today to see what the options were. If we have a medical note, we can drop the class without penalty of a W [on the student’s transcript].

Affording high schools the ability to access a college’s early alert system is somewhat rare and was made possible by the strong partnership Columbus State had with the CCRE high schools.

Some schools implemented a support model called Supplemental Instruction. High school students who had previously completed a college course successfully were paid to attend the course and provide tutoring and support to the other students in the course. These Supplemental Instruction students also provided outside-of-class study groups and relayed feedback to the instructor about areas where students were struggling.

Finally, students also had access to all the same supports that Columbus State provided traditional students. They could take advantage of on-campus services such as the library, in-person tutoring, or use of the writing lab, although it was often challenging for high school students to access these services. All students taking dual-enrollment courses from Columbus State also had access to the online tutoring system NetTutor, which a growing number of dual-enrollment students utilized throughout the project period.

<sup>13</sup> [hobsons.com/solution/starfish/](https://hobsons.com/solution/starfish/)

## Removing Barriers To Eligibility

Both the school districts and Columbus State revised policies in order to remove unnecessary barriers to eligibility. At the district-level, some partnering districts made changes to their policies about placement tests for college-level classes. One district described how it used the grant to expand access to more students by making the ACCUPLACER (a college course placement test) available to everyone. As a district coordinator described:

We've really worked hard to knock down some of the barriers related to students testing into those courses. We've made even the test itself more accessible; we've trained our counselors so that they can just offer it, and the kids don't have to try to go to a campus to take the test. ... A long time ago, before this grant started, the ACCUPLACER was invite-only, and we've now stopped doing that. Anybody can come and take it, and a couple of the [schools] make every kid take it. ... I guess the biggest change is we assume that every kid can be college students if they choose.

Another district also moved to offering placement testing in their building so students wouldn't have to go to Columbus campus.

Columbus State has also been working on policy waivers that will help expand access to students in the future. As part of Ohio's response to the pandemic, the Ohio State Department of Higher Education determined that students could use a 3.0 high school GPA as an indicator of readiness in lieu of the ACCUPLACER exam. Columbus State believed that this new requirement might restrict eligibility to students who had lower GPAs but were able to pass the placement exam. As a result, they advocated for a policy that would allow

students to enroll in courses with a GPA of 2.50 to 2.99. In Spring 2021, they received notification that this waiver was approved and they could pilot it with interested districts

In addition, Columbus State partnered with districts to develop a high school English course called "Third Space." The program both builds students' college readiness and, as of the spring of 2021, will be able to provide an alternative way of demonstrating readiness. A district coordinator described the effort:

It's called Third Space because it's not the high school space, it's not the college space, but it's a third space where the high school and college professors and teachers have come together, [and] developed out a semesterized course that really acts as a remedial English course. And [the idea is] upon successful completion with an A, B, or C in this course that only counts for high school credit, [students] can then take English 1100 for credit the second semester without having to become eligible through the placement test.



## Considerations

The CCRE experience suggests that schools can expand access to college courses for underrepresented populations when their efforts are intentional and focused. One of the primary ways the CCRE project accomplished this was by expanding opportunities in schools with high percentages of economically disadvantaged students and students of color, while also identifying and removing the barriers that prevented such students from participating.

The project findings also include some cautionary information. Two schools that expanded access rapidly faced challenges with student success in their early years of implementation and had higher-than-average numbers of students failing. Providing students access to college courses without ensuring that they can succeed in those courses is not in the best interest of students.

As a result, the findings from CCRE suggest that expanding access is not merely a matter of registering students for dual-enrollment courses. Instead, these shifts must come alongside broader school change efforts, including activities to build students' interest and college-

course readiness. Additionally, when students enroll in college courses, they need access to ongoing support to ensure they are successful. Only then will the promise of reducing inequity in access to dual-enrollment courses be realized.



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