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PROMISING PRACTICES

Rethinking Dual Enrollment to Reach More Students

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State-set requirements for dual enrollment eligibility may be indirectly undermining efforts to get more high-schoolers on a pathway to college.

Differentiated dual enrollment and pre-collegiate experiences are promising approaches to expand participation — and likely, see higher postsecondary enrollment and attainment rates — among middle- and lower-achieving students.

A substantial and growing body of research indicates that, all other factors being equal, students who dually enroll are more likely than their non-dually-enrolling peers to finish high school, matriculate in a postsecondary institution and experience greater postsecondary success.[1] Spurred by this, states are increasingly viewing dual enrollment as a strategy to promote postsecondary attainment and workforce readiness, and taking steps to broaden student access to dual enrollment coursework.

Yet, by and large, state-set eligibility requirements limit dual enrollment access to only the most academically advanced students, who are likely to pursue college after high school regardless. In many states, middle-achieving students can't participate in dual enrollment courses; and in other states, their options are limited, according to a 2016 analysis of state-set dual enrollment eligibility requirements.

However, there may be ways to provide dual enrollment and other experiences that put students on the road to college, without running afoul of state and local eligibility requirements. This may include ensuring access to options with lower eligibility expectations or requesting exemptions from current requirements in order to try out alternative eligibility criteria.

This brief proposes state approaches to systematically:

- **Broaden dual enrollment access to middle-achieving students,** including students who are college-ready but uncertain about their post-high school plans, and students who are not college-ready but would succeed in a dual enrollment course with some support.
- **Provide pre-collegiate experiences to middle- and lower-achieving high school students** that will either prepare them for dual enrollment by the final semester of their senior year or help them set their sights on enrolling in college after high school graduation.

What Does the Research Say?

In contrast to state policies largely limiting dual enrollment participation to high-achieving students, research indicates that middle-achieving high school students (whose grades or assessment scores fall just short of college readiness measures) not only can be successful in dual enrollment coursework, but also can reap substantial benefits from program participation.

In one example, two Utah high schools — one metro, one rural — developed alternate dual enrollment eligibility criteria for middle-achieving students to determine if dual enrollment participation might increase students' postsecondary aspirations and enrollment.[2] The study defined middle-achieving students as those "who qualify academically but don't participate in an accelerated program" (such as concurrent enrollment, Advanced Placement [AP], International Baccalaureate or honors) or "students who miss eligibility by a small margin where counselors and teachers see other indicators that the student, if motivated, could improve performance and continue on to college."

The two high schools developed alternate eligibility criteria, which they used to identify and recruit middle-achieving students into a dual enrollment personal finance course. Recruited students in both high schools also participated in other pre-collegiate experiences, such as college tours, advising, financial aid counseling, etc.

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Alternate Eligibility Criteria That Might Predict Success in a Dual Enrollment Class	
1	Grade level (incoming juniors).
2	Regular high school attendance.
3	Near proficient writing performance in a multi-trait essay assessment (organization, clarify of thought, conventions of grammar, content, voice, persuasiveness).
4	Sophomore ACT Plan score within two to three points of benchmarks.
5	Recent assessment results that indicate the student is reading at (or within one) grade level.
6	Course-taking patterns: **a.** A student who has been successful in 11th grade secondary language arts may not have the organizational or study skills to be successful in a college-level writing class or any college-level course (assumes readiness but may not be ready; needs to be informed on requirements of college level instruction). **b.** A student takes AP human geography in ninth grade, scores a 1 or 2 on the exam and never takes another rigorous course (lacks resilience to try again; needs to be prompted). **c.** A student who expresses interest in honors but does not enroll in honors (lacks self-motivation; needs to be prompted).
7	GPA (improvement over time versus a certain point on a four-point scale).

8	Eighth- and ninth-grade criterion-referenced test scores.
9	Teacher nomination: **a.** Regular, on-time attendance in class. **b.** Responsibly hands work in on time. **c.** Asks questions and participates in class discussion. **d.** Coursework demonstrates higher-order thinking, like the ability to formulate an opinion. **e.** Is persistent in his/her own learning. **f.** Seeks out resources or help when needed.
10	(For the rural school) Student self-recommendation/application to participate: **a.** List special recognitions, awards or projects completed or any other special achievements. **b.** List participation in school and community activities or extracurricular school activities. **c.** Make a statement of financial need to continue education. **d.** Make a statement of plans (including vocational and educational) for the future.

Source: Middle Performing Students' Eligibility for Concurrent Enrollment Program.

Final course grades in both high schools did not differ significantly between the higher-achieving students who had self-selected into the course and the middle-achieving students. Pre- and post-survey data likewise indicated an increase in middle-achieving students' self-reported behaviors associated with postsecondary success, such as academic motivation and skills (reading and writing skill/interest and critical thinking skills, among others); academic behaviors (perseverance, setting and completing goals, and problem-solving); and self-advocacy.

Additional research suggests middle- and lower-achieving students can be successful in dual enrollment courses. A 2011 report on a foundation-funded **California** initiative to engage struggling students in career and technical education (CTE) dual enrollment coursework notes, "In Redding, … students with low grades in their high school classes are earning better grades in their Shasta College renewable energy courses. In another example, a Los Angeles City College film instructor who had been concerned about his students' results on the midterm test was later impressed with their final projects, all of which were well-executed films completed on time. All the students ended up passing the course, and the instructor came out of the experience with a strengthened belief that it is important to give students the option of excelling in an area other than test taking."[3]

A widely-cited study of New York City and **Florida** students in academic and CTE dual enrollment programs found that for some measures, Florida students "with lower high school grades … benefited [from dual enrollment participation] to a greater extent than students with higher grade point averages."[4]

Other pre-collegiate experiences may offer similar benefits. For example, an experimental study of summer bridge programs found that participating students were more likely to pass college-level math and English courses and accumulate credits in their first year of college.[5] Participation in a student success or College 101 course — a college course that typically has lower requirements for participation — increases the likelihood that students will complete college.[6]

> State policy regarding student eligibility for dual enrollment should clearly reflect the state's goals regarding the target population and desired outcomes.
>
> *Broadening the Benefits of Dual Enrollment*[7]

Differentiated Dual Enrollment and Other Pre-Collegiate Experiences

As the examples from **California** and **Utah** suggest, some programs have been explicitly designed to promote dual enrollment participation and success for middle- and lower-achieving students. Yet state policies, by and large, have not created dual enrollment lanes for these students — or opportunities for pre-collegiate experiences that might either lead to dual enrollment or postsecondary matriculation for students not previously thinking about college.

Differentiated dual enrollment — defined as dual enrollment options for a wider range of learners — is a promising approach states can adopt to extend the benefits of dual enrollment participation (including higher rates of postsecondary enrollment and attainment) to middle- and lower-achieving students.[8] This approach offers programs of differing academic challenges to high-, middle- and lower-achieving students, while trying to help them to participate in progressively more rigorous options. Programs also differentiate by offering academic, as well as CTE, course options — keeping in mind that some students may be interested in both types of dual enrollment coursework.

Pre-collegiate experiences are activities that may not confer college credit, but that either prepare students for subsequent college-level learning during or after high school or help students see themselves as college material and motivate them to pursue postsecondary education.

Differentiated dual enrollment, which expands options for a wider range of learners, is a promising approach states can adopt to extend the benefits of dual enrollment participation to middle- and lower-achieving students.

To expand college access to a broader array of students, the report, *Differentiated Dual Enrollment and Other Collegiate Experiences: Lessons from the STEM Early College Expansion Partnership*, starts with these definitions:[9]

- **Most advanced academically:** Students who have always planned on going to college, and meet traditional dual enrollment eligibility requirements.
- **Academically mid-range:** Students who may hope to go to college, but are concerned about their academic eligibility, college costs and/or their likelihood of college success. These students are typically eligible for fewer advanced learning opportunities (dual enrollment or otherwise).
- **Least academically advanced:** Students who have lower academic performance and may not think of themselves as college material. That said, they may be willing to consider college under the right approach.

The report then outlines a framework that identifies dual enrollment and other pre-collegiate experiences differentiated for students interested in CTE or academic coursework, and for varying levels of prior student achievement.

DUAL ENROLLMENT AND OTHER PRE-COLLEGIATE EXPERIENCES

Students' prior academic record	*General education- focused options*	*Career-focused options*
Most advanced academically[10]	■ Dual enrollment.	■ CTE dual enrollment (more selective).
Academically mid-range[11]	■ Developmental coursework via dual enrollment programs. ■ Dual enrollment with seminar or corequisite course. ■ Transition courses.	■ CTE dual enrollment (less selective). ■ Career pathways programs.
Least advanced academically	■ Student success or college-ready courses. ■ Summer bridge programs. ■ College readiness brush-up programs. ■ On-campus experiences (tours, use of science labs, clubs, library, etc.).	■ On-campus experiences (campus tours, use of labs, etc.).

Source: Differentiated Dual Enrollment and Other Collegiate Experiences: Lessons from the STEM Early College Expansion Partnership.

Most advanced academically

Dual enrollment and CTE dual enrollment programs offer academically advanced high school students an opportunity to complete college courses and earn college credit before high school graduation. While some CTE dual enrollment courses, such as engineering, have more selective eligibility requirements that resemble eligibility requirements for general education-focused dual enrollment courses, other CTE dual enrollment courses have less rigorous eligibility requirements, placing these programs within reach of middle-achieving students.

For more information on dual enrollment programs for academically advanced students, refer to:

Increasing Student Success in Dual Enrollment Programs: 13 Model State-Level Policy Components

50-State Comparison: Dual/ Concurrent Enrollment

State Approaches to Funding Dual Enrollment

What Works Clearinghouse: Dual Enrollment Programs

What Happens to Students Who Take Community College "Dual Enrollment" Courses in High School?

Academically mid-range

Developmental coursework via dual enrollment programs[12]

Relatively few state policies explicitly permit dual enrollment programs to offer developmental coursework, according to a 50-State Comparison of state dual enrollment policies. Specifically:

- In seven states, students may access developmental/remedial courses through a dual enrollment program.
- In 15 states, plus the District of Columbia, state policy is silent.
- In 22 states, dually enrolled students are prohibited from enrolling in remedial coursework.
- In six states, policy is silent in one dual enrollment program and remedial coursework is prohibited in another dual enrollment program.[13]

In states that do allow students to enroll in developmental coursework via dual enrollment, the parameters for student participation vary. For example, while **Colorado** allows qualified students in ninth through 12th grade to enroll in dual enrollment coursework, the state limits enrollment in developmental coursework via dual enrollment programs to students who have not completed graduation requirements by the end of 12th grade and who are consequently retained.[14]

Who may teach: Regional accrediting bodies' requirements vary on who may teach developmental coursework. In some states, developmental courses may be taught by a postsecondary faculty member, high school instructor or graduate assistant.

Funding considerations: In an informal survey of two of the seven states permitting dual enrollment programs to offer developmental coursework, respondents indicated local dual enrollment funding agreements do not distinguish between credit-bearing and non-credit-bearing coursework.[15]

Transition courses

Increasingly, states are providing courses intended to bring high school seniors to, or nearer to, college readiness in English and math before the end of 12th grade. According to a recent national scan, high schools in 29 states are offering interventions to students scoring below a college-ready benchmark on a mandatory statewide readiness assessment.[16] While these courses are generally offered to 12th-graders, states may consider making such interventions available to 10th- or 11th-graders, who may be ready for dual enrollment participation after participating in a transition course.

Who may teach: High school instructors.

Funding considerations: Courses are funded in the same manner as traditional high school courses.

Dual enrollment with seminar or corequisite course

Increasingly, postsecondary institutions are shifting from the developmental coursework model — whereby identified students complete entire courses before they may be placed into credit-bearing math or English coursework — and toward a corequisite model, in which students falling short of college-ready benchmarks are placed into credit-bearing coursework and concurrently provided with supplemental instruction via companion courses, tutoring or other academic interventions.[17]

While some local efforts are underway to deliver dual enrollment courses via a corequisite model, Education Commission of the States is not aware of state policies setting parameters for this. However, **California**'s College and Career Access Pathways partnerships legislation may, in practice, encourage the delivery of dual enrollment via a corequisite model. The legislation, intended to increase dual enrollment participation among "students who may not already be college bound or who are underrepresented in higher education," requires that any remedial course taught by college faculty at the high school be delivered as an "innovative remediation course … in the student's junior or senior year to ensure the student is prepared for college-level work upon graduation."[18]

Who may teach: Because students in a corequisite model earn college credit, instructors must be postsecondary faculty or high school instructors with adjunct status at a college. That said, a corequisite course could apply a co-teaching model, in which a non-qualified instructor (for example, a high school teacher who does not meet full faculty qualifications or a graduate assistant) teaches the developmental course content and a qualified faculty member delivers the college-level content.

Funding considerations: As explained by Rebecca Watts of the University of Wyoming, "corequisite courses can be more costly if you look at short-term investments, depending on the institution. Whether a course is co-taught (paying two faculty members) or taught by one faculty member, the total number of credit hours in faculty load is increased."[19]

However, Watts added, while the short-term costs of corequisite delivery can give leaders pause, such courses provide a significant long-term return on investment "if they are well-planned, well-delivered and high-quality" in terms of greater "student success and persistence to completion." Ultimately this investment, when it results in higher graduation rates, "helps the bottom line of universities, especially in those states with performance funding based on student outcomes."[20]

Career pathways programs

Career pathways provide a sequence of courses, often beginning with high school coursework and transitioning to postsecondary coursework, that may culminate in an industry-recognized credential or an associate degree. A spike in state-level CTE policymaking that began in 2013 has resulted in a proliferation of new and redesigned career pathways programs that improve alignment from high school to postsecondary, as well as with workforce needs.

Just as with traditional and CTE dual enrollment, policies need to make clear that all students and their families should be informed of the availability of career pathways programs. For example, **Kentucky**'s Dual Credit Policy requires participating postsecondary institutions to collaborate with schools and districts to provide at least three CTE courses in a regionally appropriate career pathway. Secondary schools and postsecondary institutions are jointly responsible for providing degree and career pathway information to all students and their families.[21]

Who may teach: Traditional high school instructors can teach high school-level courses in a given pathway but must meet faculty qualifications to deliver postsecondary content.

Wyoming is one state in which community colleges have tapped industry professionals to serve as adjuncts in career pathways courses in high-demand fields, including oil and gas extraction, mining, agriculture and ranching, and allied health. Community colleges have leveraged their workforce training directors, advisory committee members and contacts with trade organizations to make these connections with qualified industry professionals.

Funding considerations: Developing pathways in new career areas, or updating existing pathways, will require funds for curriculum development and teacher professional development. Launching some pathways will require an additional investment in facilities and equipment/materials.

For more information on career pathways programs:

Aligning K-12 and postsecondary career pathways with workforce needs provides examples of efforts in 13 states to create a structure for increased business and industry engagement in career pathways, and to scale career pathway creation or redesign based on business and industry input.

In 2018, Education Commission of the States will also release a policy brief that will identify approaches to address common challenges that career pathways programs can face, related to identifying qualified instructors; securing facilities and equipment; covering (or at least defraying) student tuition, fees, materials and textbook costs; setting appropriate student eligibility requirements; and marketing and branding programs.

Least academically advanced

Student success or college-ready courses

Also known as freshman seminar or College 101 classes, student success or college-ready courses can be offered in high school to help provide students with key academic skills and knowledge of college practices. Some courses incorporate college and career advising and opportunities for each student to identify strengths and areas needing improvement. These courses deliver college material and often confer college credit, giving students the sense they are on track to college. And importantly, because students of varying academic skill levels are eligible for these courses, they are broadly accessible.

That said, state dual enrollment policies generally are silent on the offering of student success or college-ready courses. And in fact, some states limit the courses that dual enrollment programs may offer to core academic courses or courses in an approved CTE pathway, rendering these student success or college-ready courses ineligible for inclusion in dual enrollment programs.

Yet some student success courses, including courses offered through state virtual schools, are offered statewide for dual credit. For example, the **Idaho** Digital Learning Academy offers Boise State University's "Dual Credit Career and Life Planning" and "Dual Credit High School to College Transition," for which there are no course prerequisites.

States may consider revising state dual enrollment policies to make clear that dual enrollment programs may offer, or are encouraged to offer, student success or college-ready courses. Such policies should ensure courses are broadly accessible to students with varying levels of academic achievement.

Who may teach: College faculty or high school teachers who are eligible for adjunct status at the college.

Funding considerations: Courses could be delivered using the same funding mechanism as other dual enrollment courses, or if offered as a noncredit course, funded as a regular high school course with nominal investment from the postsecondary partner or a willing external partner (local business, foundation, etc.). States may also consider providing a fund to defray the cost to postsecondary institutions for their portion of the costs associated with delivering college success courses led by high school instructors at high schools.

Summer bridge programs

Summer bridge programs, often geared to rising college freshmen who need assistance with the college transition, typically broaden awareness of academic behaviors and skills critical for college success, offer college and career advising, and allow students to brush up on reading, writing and math skills — all while gaining the experience of being on a college campus.

Generally, statutes and regulations are silent on summer bridge programs, which are often governed by state or system policy documents or individual institutional policies.

States may consider developing or scaling specialized summer bridge programs for high school students, including by supplementing on-campus experiences with online or hybrid instruction. For example, a course like **Michigan** Virtual's "Reading for College Success" course could be offered online to supplement an in-person summer bridge experience for high school students.[22]

States may intentionally steer students approaching readiness for dual enrollment coursework toward summer bridge programs offered between 11th and 12th grade.

Who may teach: Because summer bridge programs are typically delivered on a college campus, only faculty and graduate assistants would typically serve as instructors.

Funding considerations: States may weigh allowing existing K-12 remediation funds (summer school/extended year or otherwise) to support summer bridge programs for high school students. Alternatively, states may authorize funds dedicated to other summer residential programs for secondary students (governors' schools, etc.) to support summer bridge programs.

College readiness brush-up programs

As previously mentioned, traditional dual enrollment participation is typically limited to students who have demonstrated college readiness on a placement exam, either a nationally recognized assessment such as Accuplacer or a state-developed exam. To prepare, students can benefit from preparation or brush-up courses facilitated by their schools. For example, Monroe Community College in **New York** points prospective students (including potential dual enrollment students) to online math and English review resources.[23]

Alternatively, states may partner with the NROC Project to provide a state-customized version of EdReady, which allows students to assess their college readiness in English and math and receive a customized online study path to address gaps in knowledge and skills.[24] **Montana** and **Nevada**, for example, have entered into partnerships with the NROC Project to provide access to edreadymontana.org and nevada.edready.org, respectively, to students statewide.

Who may teach: To broaden access, these courses could be taught or facilitated by college faculty or approved high school instructors, graduate assistants or trained private sector employees.

Funding considerations: Existing K-12 remediation funds, including those supporting hybrid or online high school programming, may support these programs.

On-campus experiences

Both college-aspiring students and those unsure of their plans after high school can benefit from participation in activities on a postsecondary campus. These activities might include campus tours, use of labs (for science and engineering courses or CTE coursework), a day shadowing a college student and access to college clubs and activities, among others.

Who may facilitate: For lab-based campus experiences, postsecondary faculty are best positioned to lead. High school teachers and other school staff are needed to facilitate and lead campus visits. College students can lead tours, provide shadowing experiences and support access to clubs and activities.

Funding considerations: These activities are relatively low-cost, since many activities would occur a limited number of times, potentially outside the school day or year.

ENDNOTES

1. Ben Struhl and Joel Vargas, *Taking College Courses in High School: A Strategy for College Readiness* (Boston: Jobs for the Future, October 2012), http://www.jff.org/sites/default/files/publications/TakingCollegeCourses_101712.pdf); and "Postsecondary Outcomes of Dual Enrollment Students" (board meeting, South Dakota Board of Regents, October 9-10, 2013), https://www.sdbor.edu/administrative-offices/academics/accountabilityReports/Documents/Postsecondary_Outcomes_Dual_Enrollment_Students.pdf.

2. Cynthia Grua and Moya Kessig, "Middle Performing Students' Eligibility for Concurrent Enrollment Program" (board meeting, Utah Board of Regents, updated May 2014).

3. Linsey Edwards, Katherine L. Hughes, and Alan Weisberg, *Different Approaches to Dual Enrollment: Understanding Program Features and Their Implications* (San Francisco: The James Irvine Foundation, October 2011), https://ccrc.tc.columbia.edu/media/k2/attachments/dual-enrollment-program-features-implications.pdf.

4. Melinda Mechur Karp et al., *The Postsecondary Achievement of Participants in Dual Enrollment: An Analysis of Student Outcomes in Two States* (New York: Community College Research Center, Teachers College, Columbia University, October 2007), https://ccrc.tc.columbia.edu/publications/dual-enrollment-student-outcomes.html.

5. Elisabeth Barnett et al., *Bridging the Gap: An Impact Study of Eight Developmental Summer Bridge Programs in Texas* (New York: Community College Research Center, Teachers College, Columbia University, June 2012), https://ccrc.tc.columbia.edu/publications/bridging-gap-impact-developmental-summer-bridge.html.

6. Matthew Zeidenberg, Paul Davis Jenkins, and Juan Carlos Calcagno, *Do Student Success Courses Actually Help Community College Students Succeed?* (New York: Community College Research Center, Teachers College, Columbia University, June 2007), https://academiccommons.columbia.edu/catalog/ac:172377.

7. Katherine L. Hughes et al., *Broadening the Benefits of Dual Enrollment: Reaching Underachieving and Underrepresented Students with Career-Focused Programs* (San Francisco: The James Irvine Foundation, July 2012), https://ccrc.tc.columbia.edu/media/k2/attachments/broadening-benefits-dual-enrollment-rp.pdf.

8. It is important to note that there is a clear distinction between differentiation and tracking. Differentiation is designed to adjust the learning opportunities available to each student to their readiness/skill level (see, for example, http://catlintucker.com/2016/06/differentiation-vs-tracking/).

9. Elisabeth Barnett, *Differentiated Dual Enrollment and Other Collegiate Experiences: Lessons From the STEM Early College Expansion Partnership* (New York: Community College Research Center, Teachers College, Columbia University, March 2018), http://www.jff.org/publications/differentiated-dual-enrollment-and-other-collegiate-experiences.

10. Academically advanced students also typically are able to take AP and IB courses, which confer many of the same benefits as dual enrollment courses. AP and IB are not included in this brief, which focuses on dual enrollment.

11. Articulated credit is another option for academically mid-range, career-focused students. However, some research suggests that because of student mobility and other factors, articulated credit results in fewer postsecondary credits.

12. Developmental education, also called remedial education, is offered to college students who are not deemed to be ready for college-level coursework. These courses are typically offered in math and English.

13. For example, Illinois policy is silent on the offering of remedial coursework through dual enrollment programs. However, administrative code specific to the offering of dual enrollment courses on a high school campus limits eligible courses to transfer courses that have been articulated with senior institutions in Illinois, or first-year courses in associate in applied science degree programs approved by the Illinois Community College Board. Non-credit-bearing courses, such as remedial courses, do not fall into either of these categories.

14. C.R.S.A. § 22-35-104(1)(d).

15. Allison Combs, Nevada System of Higher Education, email message to author, February 22, 2018; and Carl Einhaus, Colorado Department of Higher Education, email message to author, February 22, 2018.

16. Maggie P. Fay, Elisabeth A. Barnett and Octaviano Chavarín, *How State Are Implementing Transition Curricula: Results from a National Scan* (New York: Community College Research Center, Teachers College, Columbia University, December 2017), https://ccrc.tc.columbia.edu/publications/ccrc-research-brief-how-states-implementing-transition-curricula-results-national-scan.html.

17. Elizabeth Ganga, Amy Mazzariello, and Nikki Edgecombe, *Developmental Education: An Introduction for Policymakers* (Denver: Education Commission of the States, February 2018), https://www.ecs.org/wp-content/uploads/Developmental-Education_An-Introduction-for-Policymakers.pdf.

18. West's Ann.Cal.Educ.Code, § 76004(n).

19. Rebecca Watts, email message to author, February 26, 2018.

20. Ibid.

21. "Dual Credit Policy," Kentucky Council on Postsecondary Education, effective fall 2016, http://cpe.ky.gov/policies/academicaffairs/dualcreditpolicy.pdf.

22. "Courses," Michigan Virtual, accessed April 2, 2018, https://michiganvirtual.org/courses/students/page/12/.

23. "Preparing for Your Test," Monroe Community College, accessed April 2, 2018, http://www.monroecc.edu/depts/testingservices/preparing-for-your-test/preparing-for-your-test/.

24. EdReady, accessed April 3, 2018, https://www.edready.org/home.

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