

Overview

The dual enrollment policy and practice field is seeking new high-quality research to answer important policy, practice, and program design questions that will have a major impact on student access and success. To support that call, a group of dual enrollment researchers and policy and practice professionals led by Dr. Jason Taylor at the University of Utah published <u>Research Priorities for Advancing Equitable Dual Enrollment Policy and Practice</u> in July 2022.

This significant research project provides a comprehensive overview of what dual enrollment research currently tells us about this growing strategy for improving college access and success. Key findings include:

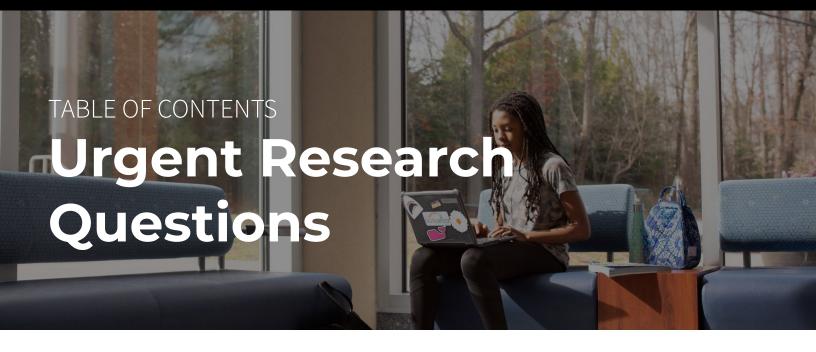
- **Dual Enrollment is an Evidence-Based Practice that Has Broad Positive Impacts on Student Outcomes** -Participation in these programs improves a student's likelihood of graduating high school, enrolling in college, and completing college.
- Dual Enrollment Expands Learning Opportunities & College Access, & Has the Potential to Improve Local Communities More access to dual enrollment leads to better college outcomes for students, which creates a more educated populace who can contribute more to the local economy.
- **Dual Enrollment Addresses Increasing Demand for College-Level Education & Increasing College Costs** Dual enrollment provides students with access to free college course experiences, potentially reducing the overall costs of college.
- **Dual Enrollment has Broad Support from Students, Families, High Schools, Colleges, & Policymakers** Support for these programs from different stakeholders is strong and bipartisan.

The research agenda also outlines more than 150 research questions to advance the field's understanding of this model and how to effectively design, implement, and support it to promote student access and success. While the findings from current research are compelling, there is still a lot to learn to properly structure, calibrate, and target these programs so that they help a broader range of students prepare for postsecondary success.

Following the release of this suite of new research questions for dual enrollment, a group of dual enrollment researchers, policy and practice professionals, and funders gathered to provide guidance to the field about which research questions could yield high impact and actionable information through the lenses of centering equity and justice in dual enrollment research, examining dual enrollment design and its influence on access and outcomes, and refining dual enrollment outcome measures. This resource was developed as a result of collaboration and consensus within that group, as well as a robust open call for public input from the field of dual enrollment stakeholders.

It is our hope that any researcher looking to undertake new research related to dual enrollment would consider aligning their research questions to one or more from the following list of key priority areas for study.

The terms *dual enrollment, dual credit*, and *concurrent enrollment* are commonly used to refer to high school students taking college courses. States and localities use different terms and these terms may have different meanings by location. This paper uses the term *dual enrollment* to include all types of programs and courses that enable high school students to enroll in and earn college credit.



This resource identifies 10 of the most urgent sets of research questions related to dual enrollment, addressing:

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SECTION 01 EQUITY

How do students' identities and backgrounds interface with access, outcomes, and student experiences in dual enrollment courses and programs?

More research shedding light on "who is and is not benefiting" from dual enrollment is needed to catalyze equity-focused reforms among dual enrollment practitioners and policymakers. We need to know the state of inequities in this field in order to address them. The existing data, which shows mixed outcomes for different groups, is too limited and frequently not intersectional.

Current national and state level data capably describes to us the existence of equity gaps in access to dual enrollment. However, we lack high-quality nationwide information and descriptive data that examines both the causes for those disparities, and looks more deeply at what kind of dual enrollment experiences students have access to. The field would also benefit from additional data and research examining short- and long-term outcomes for students in different demographic groups, and how student experiences vary based on identity.

More accurate research on disparities in access, outcomes, and experiences, particularly for student populations that there is less available data on, could help make the case for policymakers to invest in dual enrollment and implement policies designed to improve access, outcomes, and experiences. This work should also engage with students directly, particularly those who are underrepresented in the programs, to ensure their voices shine through strongly in understanding the specific and unique challenges they face navigating these programs.

- Explaining why student access, outcomes, and experiences in dual enrollment courses and programs vary based upon:
 - Race and ethnicity,
 - Gender,
 - Disability,
 - Family income and socioeconomic status,
 - Geography (inclusive of different states, and regions, as well as within states),
 - Prior academic performance,

- English language learner status,
- First generation status,
- Refugee or undocumented status,
- Homeless and foster youth status,
- $\circ~$ Justice impacted status, and
- Other student identities relevant to this discussion

- How dual enrollment experiences shape students' identities, particularly for students from populations historically marginalized from higher education.
- Applying an intersectional lens to research that examines practices to effectively recruit and retain students from underrepresented backgrounds and studying effects by different course types, for example examining strategies to expand access to Black females to STEM courses, or Hispanic males to dual enrollment generally.
- Whether state data systems have the needed capacity and infrastructure to collect more comprehensive, accurate, and timely data on student access, outcomes, and experiences. These data systems should be able to show us where gaps exist, and also provide nuanced information about how different student populations access and move through these programs differently (such as the kind and location of colleges they matriculate to post-high school graduation).
- Whether it is more feasible to collect this data nationally or at the state-level.
- How students' identities impact their experiences before high school, and what consequences that has for dual enrollment access and success.
- The causal factors that impact differing student access and outcomes, particularly the state and institutional structures, biases, or policies, as well as how counselors or faculty are informed and advise students about these opportunities. This could be contrasted with an examination of students' own perceptions about their ability and likelihood to participate in dual enrollment.

What are the unintended impacts of dual enrollment programs on students? How widespread are the unintended impacts, and how unique or attributable are they to dual enrollment specifically? How can the unintended impacts be managed through policy or practice?

The dual enrollment policy and practice community has been in expansion mode for some time, with program availability continuing to spread across the country. With this expansion, we need a more nuanced understanding of both the positive *and* negative impacts of dual enrollment on students. A rigorous analysis of these impacts will be important to helping identify supports that would facilitate expansion of dual enrollment without "sacrificing rigor," and may also help make decisions about how to guide or focus the future expansion of dual enrollment.

RESEARCH ALIGNED TO THIS QUESTION SHOULD EXAMINE FACTORS SUCH AS:

- Whether the expansion of dual enrollment with and without appropriate student supports brings about greater equity of access and success for students.
- The student impact of failing a dual enrollment course on aspirations, goals, outcomes, and federal financial aid eligibility and availability.
- Potential negative impacts on students from earning excess credit to a degree through dual enrollment, the causes for that, and how to address it.
- The social impact on students participating in a dual enrollment course.
- How students can be incentivized or supported to make intentional and meaningful dual enrollment course selections that advance them on a journey towards their post-high school goals.
- How access can be expanded in dual enrollment without sacrificing rigor.

What are the most effective strategies to encourage more equitable student participation in dual enrollment for all students, particularly marginalized students? What advising models work best for students & specifically for marginalized students, and how can they be scaled?

We have clear evidence of disparities among student access and success in dual enrollment, but we need to understand strategies to address mindset and gatekeeping of student access by the adult support system around students, inclusive of teachers, administrators, and counselors. It likely matters where, how, and from whom students get information and make relationships related to dual enrollment, and we should understand that in more detail. We need better evidence on clear messaging to help families & students understand the value & use of dual enrollment.

- Specific building-level and classroom practices that encourage more equitable participation of dual enrollment students, and how those practices can then be elevated through incentives or requirements at the state level.
- Ways that state-required individual learning plans or career and academic plans can be leveraged to support students participating in dual enrollment.
- How dual enrollment can be used as a credit recovery strategy for students.
- The relationship between marketing and student outreach and other institutional factors such as student eligibility criteria, quality, and cost policies.
- How beliefs held about dual enrollment by adult gatekeepers, and beliefs held about dual enrollment by students and parents align or conflict, and how messaging strategies for each audience can be developed and implemented to advance equity of access and success.

SECTION 02 Goals & Policy



What are the explicit and implicit intended goals and aims of state and local dual enrollment policies and programs? To what extent are those goals being achieved? How do those align, if at all, with educator, student, family, and community goals and perceptions of dual enrollment?

A better understanding of the goals behind dual enrollment that are held at the local and state level, as well as seeing how those goals align with the perceived value and benefits of dual enrollment from educators, students, families, and their community, is an often-overlooked area of research that will help guide us toward understanding whether or not we are implementing programs that are achieving the goals we've set. Better understanding these goals will ensure that program and policy design follow the needs of students and their families. It is also important to unpack the explicit goals, while also looking at those implicit goals held by system actors.

- Whether the goals of the program are articulated.
- Whether and how the goals of dual enrollment programs and stakeholders are contested, conflicting, and evolving.
- How the goals of dual enrollment program administrators and policymakers align with, or differ from, those held by students and families and by educators.
- Whose goals should be prioritized if or when the goals of policymakers, educators, and students and families are misaligned, and the implications that holds for program design.
- How goals are aligned to outcomes, and how those outcomes are being tracked during implementation so that direct connections can be made to goals.

What areas of statewide policy are most influential in impacting more equitable student dual enrollment participation and outcomes?

While there has been significant attention on state policy actions to support dual enrollment access and success, there has been little evaluation of the impact of specific state policies, particularly as a tool for advancing equity of access and success in dual enrollment. As states continue to invest energy, attention, and resources into state policy reforms in the dual enrollment space, it is essential that research-backed interventions be advanced. State policies create the necessary conditions, and provide the resources, for dual enrollment expansion, and policymakers need to know whether those policies have the intended effect on student outcomes. In addition, policymakers need to know the size of the effect of specific state policy interventions on student outcomes, to ensure that resources are appropriately targeted at the highest impact interventions.

- Which policy barriers are the most significant contributing factors impeding equity of access to dual enrollment? Related to this, which existing policy interventions provide the biggest impact on improving equity of access and success to dual enrollment?
- The role and impact of state actors (agencies, associations, professional organizations) in supporting improving equity of access and success to dual enrollment through policy implementation and stakeholder support.
- The impacts of the different funding models of dual enrollment on student access and success.
- How the shift to multiple measures of eligibility in states and dual enrollment programs has impacted student access and success in dual enrollment, particularly for underserved student populations, and which alternative eligibility criteria are most effective, including having no academic eligibility criteria. This should include examining different eligibility requirements for academic and CTE courses.
- Whether and how automatic acceleration policies impact student access and success in dual enrollment.
- How states and local programs can sustainably support student transportation to and from instruction.
- The impact of state credit recognition and transfer policies on student access and success.
- How governance structures for dual enrollment impact the growth of dual enrollment, its goals, and program quality.
- What role food insecurity plays in students' ability to participate or not participate in dual enrollment, and strategies to mitigate it.

Outcomes and Return on Investment

What is the return on investment in both the short-term and long-term from dual enrollment, and how do those differ for different groups of students? How do the returns vary by dual enrollment program, model, course types, design feature, and by student populations? How can dual enrollment support local and state workforce development in high-demand jobs and fields?

Policymakers and practitioners really want to know the return on investment related to dual enrollment. A nuanced understanding of the returns to dual enrollment investments is important for students and families, particularly if they are incurring costs. At the same time, a more holistic examination of the returns of dual enrollment that characterizes the returns to higher education institutions, federal and state governments, and the taxpayers will help support the expansion of dual enrollment programs. Understanding these returns will also facilitate the expansion of targeted investments necessary to foster better relationships between high schools and institutions of higher education and provide students with the holistic and equity-focused support that they need to thrive in these programs. Equally important, the social returns to dual enrollment investments must also be the subject of research, as positive returns for students and institutions can have positive impacts downstream for the community, the industry and the overall strength of the workforce.

- How return on investment can be defined and quantified, since it can be conceptualized differently (financial, educational, organizational) and applied differently to different actors in the system (students, high schools, colleges, the state, the nation).
- What data are needed from states and dual enrollment programs to build out high quality return on investment analyses.
- Determining who bears the costs related to these programs and how that factors into any discussions about return on investment.
- The role of CTE dual enrollment, and its role in promoting career access and success (and the subsequent impact that has on return on investment).
- What are the returns to dual enrollment credits and how do those differ for different populations of students (such as low-income and underrepresented)? What are the differences in these returns across different programs and institutions?

What is the relationship between how much dual enrollment a student takes, and the impact and outcomes that student experiences, including credential attainment? What number(s) and type(s) of dual enrollment courses are most effective for students' college and career transition and success?

It is important to take a more focused and clear look at the relationship between dual enrollment dosage - how many courses a student takes - and what impact that has on achieving the benefits of dual enrollment for students. Is there a threshold over which these benefits kick in? Begin to attenuate? Is there such a thing as "too much" dual enrollment? What impact does student participation in pathways or credential programs have on these questions?

This question is deeply connected to program design, how funding is allocated for these programs, how pathways are developed and implemented for students, and wider policy decisions about how much dual enrollment to finance and/or require programs to provide.

It also contributes towards the overriding discussions about the best way to blur or reimagine the lines between high school and college. And for those students who are taking more dual enrollment than just one course, but are unlikely to earn the full associate's degree, what is the value of that to students and why do they pursue it?

- Whether there is a generalizable dosage of dual enrollment that maximizes positive impact (aligned to the program's goals) for students.
- How outcomes for students differ by dual enrollment subjects, disciplines, pathways, and types of courses, as well as how outcomes vary for students based on their goals and the types of dual enrollment courses that they take.
- What impacts the dual enrollment program's structure (i.e. whether it is part of a structured, coherent, and sequenced program of study or not) has on student experiences and credential attainment.
- Whether it is possible to design programs that effectively address the needs of academically advanced students as well as those who may not have planned to go to college.
- Whether benefits of dual enrollment "taper off" or reverse beyond a certain level of credits.

What is the full picture of dual enrollment impacts across the whole of a student's life, inclusive of both short-term impacts realized during or shortly after the program, and long-term impacts that might be realized during career? Where are those outcomes strongest?

There is some qualitative research that looks at this topic, but we need additional research to examine this question from the perspective of a student's whole life, as it has a number of implications for program design. This could include comparing aspirations prior to taking dual enrollment against aspirations during/after taking dual enrollment, and measured at different stages in a student's life, something which is becoming increasingly possible as dual enrollment programs mature and the earliest students in modern dual enrollment programs progress through their careers.

Understanding this question would also influence how programs and policy should see dual enrollment as a tool for addressing postsecondary decline. Student postsecondary enrollments continue to fall, but dual enrollment participation continues to grow. Why is that? And what implications does that have for the role dual enrollment can play in promoting college access and success? Examining this question in more detail would yield insight on specific program mechanisms that influence students' college aspirations.

- The extent to which the impacts of dual enrollment programs are realized in the shorter-term, through outcomes such as learning, social-psychological outcomes (e.g. aspirations, self-efficacy, belonging, motivation), and college matriculation.
- The extent to which the impacts of dual enrollment are realized in the longer-term, such as through a deeper examination of college graduation or employment outcomes.
- How dual enrollment influences students' aspirations to go to college and how that varies by program and course types, with a particular focus on students who are underrepresented in higher education.
- How dual enrollment impacts students' motivation to attend college, and their motivation to expand beyond their initial aspirations for after high school, with a particular focus on students who are underrepresented in higher education.
- How states and programs are preparing students to be excited about and engaged with participating in dual enrollment, and whose responsibility that should be.
- Best practices related to how students are introduced and oriented to college expectations, especially for first generation college students.

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SECTION 04 Program Design

How can dual enrollment programs be built and then implemented to maximize benefits both for students and for the high school and colleges that run the programs? What are the key components of different models (taken at the high school, taken at the college, taken online) to maximize their effectiveness? What are the primary factors that explain mixed evidence on the impacts of dual enrollment programs, and at what level do those factors reside?

We need more research unpacking the ways in which dual enrollment programs can be constructed and implemented to maximize benefits, and minimize negative impacts, to the high school and college partners engaged in their operation. As dual enrollment grows, we need a much clearer understanding of how dual enrollment partners can be designing their programs to serve the widest population of students possible, and thereby expand the overall population of students in higher education.

In addition, with significant diversity in program model and type, it is important that we get a better understanding of what impact the different modalities and types of dual enrollment have upon students. This is a key question for funders and policymakers, who want to fund the expansion and support of program models and modalities that show student success, and particularly contribute towards closing equity gaps. The answer is also important to K-12, so they know where to invest money and resources, and to parents and students who need to be able to make more informed choices about participation.

Questions about program design have only become more complicated since the COVID-19 pandemic. One of the long-lasting impacts of the COVID-19 pandemic on dual enrollment is likely to be the significant expansion in the availability of online courses for students. It is essential to research this change to understand the impacts of the significant increase in online dual enrollment, particularly as programs leverage the model to solve some of the logistical challenges from in-person classes. We need to understand whether online models support student success, particularly for marginalized students, and the broader implications of the availability of online dual enrollment as communities still struggle to provide universal access to high speed internet for students. What implications does expanding online dual enrollment have for scaling program availability for more students?

- Conceptualizing the different dual enrollment designs and building the basis for a comparative analysis between them.
- How dual enrollment program design impacts K-12 and higher education budgets, and how to ameliorate costs in program design.
- How institutions of higher education can successfully incentivize or encourage their dual enrollment students to matriculate to their institutions after high school graduation.
- What impacts different modalities of instruction have on student access and success, and whether it makes a difference which kind of instructor students have (and what supports those instructors receive), at which location they take the courses, or whether dual enrollment students are segregated or integrated into the traditional student population.
- What wrap-around supports make these programs successful for students, particularly those who are underrepresented in higher education, and which should become embedded across dual enrollment programs regardless of modality or design.
- How program design can be optimized to ensure that students who do not traditionally qualify for dual enrollment succeed.
- Whether existing research that shows mixed evidence for dual enrollment programs is attributable to policy problems, institutional challenges, lack of awareness by students and parents, or some other factor that needs addressing.
- The impact of intentionally embedding college readiness skills in dual enrollment course experiences or summer bridge programs.
- How dual enrollment programs are staffed at the K-12 and college levels, and how that impacts student outcomes and experiences.
- What effective approaches exist to translate research on effective program design to positive changes in institutional policy and practice on a large scale.
- The prevalence of online dual enrollment in the US, the different types of online dual enrollment modalities, who instructs these courses, and what impacts they have on student access, outcomes, and experiences.
- What best practices exist and can be elevated in online dual enrollment, and how effective practices can be scaled.

How are effective dual enrollment instructors prepared and developed? What qualifications are most necessary to be a dual enrollment instructor and what state or accreditation incentives are most important to build capacity to serve marginalized students? What are effective practices for providing professional development and support to dual enrollment instructors?

There are lots of questions and concerns around dual enrollment instructor qualifications and support through professional development, but little evidence. In addition to having little evidence, this is also a divisive issue, with deeply held values and opinions related to the perceived notions of what the appropriate instructor qualifications should be. But the reality is that dual enrollment is a liminal space, in which the different instructors are trained differently, with different focus areas in how that training is then applied. We need additional research to inform this discussion and guide how the conversations develop, as sweeping qualification standards changes can have significant upheaval to programs and policy.

- The impact of accreditor requirements on student access and outcomes in dual enrollment.
- What factors contribute towards high quality instruction of dual enrollment students that lead to strong student outcomes.
- What constitutes successful teacher credentialing initiatives for dual enrollment, and what strategies exist to support the credentialing of instructors in areas that currently lack dual enrollment instructors.
- What innovative practices are being utilized to support instruction in dual enrollment spaces outside of credentialing, and where, and the role that colleges of education should play in working to address the credentialing shortage.
- Whether participation in dual enrollment instruction leads educators to make changes in their pedagogical and/or content approaches in dual enrollment and in other courses.

SECTION 05 Conclusion

There is significant opportunity to build upon the existing body of research on dual enrollment to inform the next phase of work supporting the expansion of access and success for students in these programs. With answers to the urgent questions outlined in this document, the policy and practice field will be positioned to maximize the value of these programs for students.

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