

EPSOs in Action



Promoting Equitable Access and Success in Early Postsecondary Opportunities

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Introduction

In June 2019, the Tennessee Department of Education held a research-practice mini conference on early postsecondary opportunities (EPSOs) in Nashville. The purpose of this conference was to bring together policymakers, researchers, and practitioners to discuss new research findings on EPSOs and inform decision making around EPSOs in districts and schools. TERA staff attended, participated in discussions, and worked with the department to develop this report on the research presented on EPSO attainment.

Participants identified the following major takeaways from the conference:

- **1** EPSOs can have positive effects on student achievement, high school graduation, and college going rates, and these effects vary in significance across student groups and the type of EPSO.
- **2** The goal of EPSOs is to foster postsecondary success; however, research evidence suggests that students in both statewide dual credit and AP programs often struggle to pass the exams and lose confidence in their own academic strengths.
- **3** Partnerships between K-12, postsecondary, businesses, and community organizations are vital to the development and management of EPSOs.

WHAT ARE EPSOs?

EPSOs are courses and exams that give students postsecondary credit while still in high school.

Students who take advantage of some EPSOs are more likely to enroll and persist in a postsecondary environment (Allen & Dadgar, 2012; Cowan & Goldhaber, 2015; Giani, Alexander, & Reyes, 2014), (An, 2013; Shapiro et al., 2016; Taylor, 2015) Although, research on this is mixed (Hemelt, Dynarski, Schwartz, 2019).

The theory of action around EPSOs is that they introduce students to college-level coursework and expectations while reducing time to degree and cost for students once they enroll in postsecondary. Below are the four types of EPSOs discussed at this conference. For more on other EPSO offerings, click here.



Advanced Placement (AP) courses are postsecondary level courses taught in high schools. Students complete the courses with AP exams and may earn postsecondary credit in that subject with a qualifying score.

2 DUAL ENROLLMENT

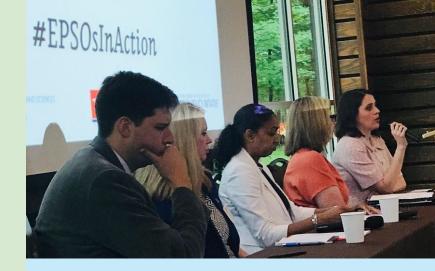
Dual Enrollment courses are postsecondary courses taught at either a postsecondary institution or the high school. Students enroll at the postsecondary institution where it is offered and can receive postsecondary credit. Students may also apply for **Dual Enrollment Grants** to cover the cost of tuition and fees for these courses.

3 STATEWIDE DUAL CREDIT

Statewide Dual Credit are college-level courses taught in high schools. Students complete the courses with online challenge exams. If students earn a passing score, the courses may be applied for credit at any public Tennessee postsecondary institution.

1 INDUSTRY CERTIFICATION (IC)

Industry Certifications are credentials awarded to students that complete secondary and postsecondary career and technical education programs and courses. They are awarded by non-academic or government agencies, require exams, and are time-limited, meaning students need to re-up certifications periodically.



EPSOs IN ACTION CONFERENCE

The event was held over the course of one day. Dr. Sue Dynarski, professor of public policy, education and economics at the University of Michigan kicked the conference off by grounding participants in the broader context of college access research. Dynarski presented a few key data points on the current atmosphere of postsecondary attainment. First, only a third of students attend college at all. Among these students, income inequity is **significant** — only 9% of low-income students attend and graduate from college compared to 54% of students in the highest income bracket. Further, many factors contribute to the college attainment gap, including insufficient college preparation during the K-12 years, complicated funding systems that make postsecondary institutions difficult to access, misinformation regarding college tuition, and the high cost to attend that is only increasing over time. While there is no "single magic bullet," to closing these gaps, Dynarski cited EPSOs as one potential method for closing gaps in postsecondary attainment.

Following Dr. Dynarski's presentation, leading researchers shared current findings on the effects of various EPSOs such as Advanced Placement, dual enrollment, dual credit, and industry certifications. Participants were encouraged to attend these sessions and ask in-depth questions of the research and how it pertained to their individual contexts.

The second half of the conference focused on district teams, postsecondary leaders, and policymakers reflecting on the research and discussing their experiences and challenges with EPSOs. Discussion groups delved into how the research fit into their context as districts and school leaders worked to develop action plans to improve the use and impact of EPSOs.

KEY TAKEAWAYS





EPSOS CAN HAVE POSITIVE EFFECTS ON STUDENT ACHIEVEMENT,
HIGH SCHOOL GRADUATION, AND COLLEGE GOING RATES,
AND THESE EFFECTS VARY ACROSS STUDENT GROUPS
AND THE TYPE OF EPSO.

The research presented suggests that students experience the different types of EPSOs with varying success depending on their background. For example, research on dual enrollment programs in Tennessee found that white students are more likely to take dual enrollment courses, even though dual enrollment participation has a large impact on male students of color. Research on statewide dual credit courses in Tennessee found that effects vary by student demographics as well. In particular, African American and Hispanic students who participated in statewide dual credit math courses in their junior year were more likely to take AP math courses their senior year.

Additionally, research on advanced placement programs from across the country in science found that while students improve their scientific inquiry skills by taking advanced placement classes, they also lose confidence in their likelihood of success in college courses due to the increased rigor of the courses and assessments.

Further, while participation in CTE courses leading to industry certification boosts graduation rates in Massachusetts, not all students participate in these courses; students of color and students with disabilities are more likely to take advantage of this opportunity than their peers. In addition, the likelihood of enrolling differs

by gender. Male students are more likely than female students to take advantage of this particular EPSO offering.

Practitioner discussion participants also pointed to several reasons why students of color enroll in EPSOs at lower rates. For example, EPSO financing can be difficult to understand, and students who have working parents or who come from single-parent households may have a harder time attending the informational fairs or receiving guidance on how to navigate EPSO financing and logistics.

These findings indicate that EPSOs can certainly have positive effects on student outcomes, but there are differential effects depending on the students' background and the type of EPSO in which students are enrolled.

Participating in EPSOs can yield positive effects for students, but the effects differ depending on students' background and the type of program in which students enroll.



THE GOAL OF EPSOS IS TO FOSTER POSTSECONDARY SUCCESS, HOWEVER, RESEARCH EVIDENCE SUGGESTS THAT STUDENTS IN BOTH DUAL CREDIT AND AP PROGRAMS OFTEN STRUGGLE TO PASS THE DUAL CREDIT EXAMS AND LOSE CONFIDENCE IN THEIR OWN ACADEMIC STRENGTHS.

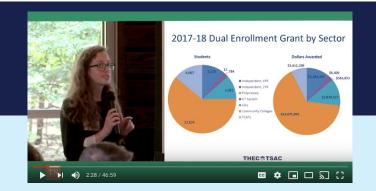
Practitioners attending the EPSOs in Action conference generally expressed support for their schools and districts offering EPSOs. However, they also have concerns about how individual students experience EPSOs, and the potential negative impact that the experience could have on student ambition and performance. The research evidence, coupled with their

own experience with students, has led some practitioners to worry that students may lose confidence in their overall academic strengths while taking EPSOs. In particular, practitioners expressed concerns that low-income students could be negatively affected by the EPSO experience, meaning that EPSOs might not yield the same benefits for less advantaged students.

RESEARCH REVIEW

Promoting Equitable Access and Success in Dual Enrollment

Madison Dell, PhD Candidate at Stanford University Amanda Klafehn, Director of Research and Strategy with the Tennessee Higher Education Commission



BACKGROUND

The research team at THEC presented descriptive findings on postsecondary outcomes for students who took dual enrollment courses in Tennessee from the high school graduating classes from 2010 to 2017.

FINDINGS

Researchers focused on what we know about dual enrollment, who is likely to take dual enrollment courses, and what subgroups can expect the greatest impact from dual enrollment course-taking.

Key findings include:

- Even when controlling for various demographic, socioeconomic, and academic factors, white students are more likely to take dual enrollment courses than black and Hispanic students.
- Despite the fact that most dual enrollment students take dual enrollment at community colleges, dual enrollment students are more likely to enroll in four-year universities than similar peers who did not take dual enrollment.
- Male students who take dual enrollment see a larger increase in their postsecondary enrollment rate than female students who take dual enrollment.
- White students who take dual enrollment see a larger increase in their rate of full-time college enrollment than non-white students.
- Students from rural high schools experience the most impact from dual enrollment courses in both high school graduation rates and postsecondary enrollment rates, as compared to students in urban or suburban settings.

IMPLICATIONS

- In order to expand EPSO options to more students, school leaders should align EPSOs with college-going patterns and engage with multiple postsecondary partners.
- It is important to provide a consistent definition of dual enrollment to students. Educators should clarify what dual enrollment means, communicate the measures for placement to students and families—particularly those traditionally underserved by these programs—and utilize state resources to identify eligible students and align student interests to EPSOs.
- School leaders should set goals for increasing equity in dual enrollment participation, especially for underserved minority students.
- In order to support dual enrollment success, districts and school leaders can develop faculty/adjunct training for working with high school age students and supply academic support resources, like those available on college campuses, to students taking dual enrollment at the high school.

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For example, school counselors stated that they struggle to convince those students who were previously struggling in school to take advantage of EPSOs. Given the rigor of the courses, the difficulty of related exams, and the cut scores for attaining college credit, many counselors are afraid that EPSOs could have more of a negative impact on the student academic experience than a positive one. District leaders and school practitioners also expressed concern that students are sometimes unwilling to participate in an EPSO because they think it may lead to lower grades on their report cards. According to practitioner discussion participants, although EPSOs rarely impact students' overall GPA, students worry that the presence of their

EPSO performance on a transcript might affect their college applications or eligibility for dual enrollment grants, for which students must maintain a 3.0 GPA. In other words, students are concerned that colleges will notice their EPSO grade is lower than their other grades, even though it won't impact their overall GPA, and are therefore resistant to taking advantage of EPSOs. Additionally, district and school leaders worried that students may no longer wish to attend postsecondary institutions after unsuccessfully experiencing rigorous coursework in the EPSO. Discussion participants indicated that this could ultimately dissuade students from applying to colleges.

RESEARCH REVIEW

Assessing Student Outcomes and Attaining Equity and Access in Advanced Placement Courses

Dylan Conger, *Professor of Public Policy and Public Administration at The George Washington University*



BACKGROUND

This session presented Dr. Conger's findings from the first randomized control trial on the impacts of student AP course taking on educational experiences, the AP Science Impact study. In the study, a random set of schools across the country were randomly assigned to offer AP science or continue not offering any AP science courses. She also explored issues of equity in AP course taking. Although students were randomly assigned to AP science courses in this study, it is important to note that these findings were based on the introduction of AP science in schools where the course had not been previously offered. Meaning, these findings are best generalized to schools that do not have longstanding AP programs.

FINDINGS

Although students were randomly assigned to AP science courses in this study, it is important to note that these findings were based on the introduction of AP science in schools where the course had not been previously offered. Meaning, these findings are best generalized to schools that do not have longstanding AP programs. The study finds suggestive evidence that taking an AP science course increases students' science skill and their interest in pursuing a STEM major in college. AP course-takers also have lower confidence in their ability to succeed in college science, higher levels of stress, and worse grades than their control counterparts.

PLAY VIDEO

IMPLICATIONS

Dr. Conger presented the following suggestions for AP improvement:

- Identify AP-eligible students earlier in order to adequately prepare them for the rigor of AP courses.
- Be transparent with students on what they will get out of taking AP courses (they may gain knowledge and subjectmatter interest, but also may experience a decline in grades and confidence).
- Revisit and revise AP grade weighting so students are not penalized for taking harder courses.
- Offer AP exam preparation to low-income students and inquiry-based PD for teachers.

For more of Dr. Conger's work on Advanced Placement visit here or here.

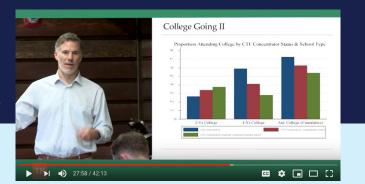


In the end, conference participants broadly agreed that EPSOs can have positive benefits for students and that postsecondary institutions and high schools should align curriculum and resources so that students experience adequate rigor and are not penalized for taking advantage of the EPSO. Participants also discussed EPSO offerings and participation in light of Tennessee's ESSA plan, Tennessee Succeeds, that incentivizes students of all academic abilities to earn EPSO credit in high school. Discussions at this conference highlighted that this incentive has the potential to aid in enrolling more low achieving students when it is coupled with adequate supports and resources aimed at mitigating barriers to accessing and succeeding in EPSOs.

RESEARCH REVIEW

Assessing Student Outcomes and Attaining Equity and Access in Industry Certifications and CTE Pathways

Dr. Shaun M. Dougherty, Associate Professor of Public Policy and Education at Vanderbilt's Peabody College



BACKGROUND

Dr. Dougherty presented findings from a study analyzing postsecondary outcomes for students who include Industry Certification assessments as part of CTE pathways.

FINDINGS

In this study, Dr. Dougherty focused primarily on Massachusetts-based high school CTE concentrators.

Key findings include:

- Female students are less likely to take CTE courses than their male counterparts.
- Low-income students, English learners, and students with disabilities are more likely to take CTE courses than their peers.
- Attending a CTE-focused high school boosts graduation rates by 10 percentage points for all students who take the courses, and 15-20 percentage points for low-income students.
- Despite spending fewer hours in an academic instructional setting, students did not experience a decline in test scores as a result of CTE enrollment.
- Being a CTE concentrator makes students 4 percentage points less likely to enroll in college immediately after high school.

 Positive effects are not uniform across all different CTE program areas. Different programs see more student success than others.

IMPLICATIONS

- Based on the gains Dr. Dougherty examined for particular students, future research is needed to better understand the value of offering CTE programs in a range of K-12 institutions and state settings.
- Identify high-value programs and incentivize earning high-value rather than low-value certifications in high school CTE programs. Much of the CTE revamping has resulted in a bigger emphasis on programs that result in defined certificates or credentials.

For Dr. Dougherty's related works on CTE, click here.

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UNIVERSITY AND K-12 PARTNERSHIPS ARE VITAL TO THE DEVELOPMENT AND MANAGEMENT OF EPSOS EPSOS Prometing Equitable Access and Success in Early Postsecondary Opportunities Ministry, Light 2019 A Research Practice Conference

Conference participants also attended a working lunch with a panel discussion on the challenges of forming strong partnerships between high schools and postsecondary institutions.

PANELISTS INCLUDED:

Samantha Gutter, Senior Director of Strategic Initiatives at SCORE

Courtney Orians, Associate Director of Admissions for Dual Enrollment and Special Enrollment Programs

Armella A. Smith, Senior Dual Enrollment Advisor for Shelby County Schools

Vanessa Farris, Overton County Schools GEAR UP Site Coordinator

Justin Crice, Tennessee Pathways Regional Coordinator for the Northwest region

The panelists discussed the importance of developing and maintaining strong relationships with postsecondary institutions. All panelists agreed that a one-size fits all approach does not work for all school partnerships. Schools must seek out different relationships depending on the needs of their students and their school and district context. In other words, some districts may benefit more from one particular EPSO partnership, like CTE programming, while others would need to seek out more access to dual enrollment courses. Additionally, panelists suggested that districts should seek to build relationships and find contacts within postsecondary institutions in order to stay up to date on the latest information and ensure that all students are taking correct courses. Lastly, the panelists proposed that partnerships should extend beyond K-12 and postsecondary to include businesses and community organizations.

RESEARCH REVIEW

Assessing Student Outcomes and Attaining Equity and Access in Statewide Dual Credit Courses

Dr. Steve Hemelt, Associate Professor of Public Policy at the University of North Carolina at Chapel Hill



BACKGROUND

Dr. Hemelt presented his evaluation of the effects of student participation in a randomized control trial in Tennessee, where a set of schools were randomly selected to offer a of the first statewide dual-credit course in a core subject area—Advanced Algebra and Trigonometry—while other schools were randomly selected to wait a year to offer the course. Dr. Hemelt shared findings from the evaluation of the course as well as emerging findings related to dual-credit courses in general, including those with a CTE focus.

FINDINGS

Key findings include:

- Dual credit math courses and AP math courses function as complementary opportunities
- Dual credit algebra shifted students away from remedial math and toward higher-level math courses in 12th grade. In addition, African American and Hispanic students who participated in statewide dual credit Advanced Algebra and Trigonometry course in their junior year were more likely to take AP math courses their senior year.
- Access to the dual credit course resulted in shifts away from two-year institutions into four-year universities, especially for students in the middle of the 8th grade achievement distribution as well as those first exposed to the opportunity to take the course as 11th graders.

IMPLICATIONS

- Researchers are interested in further exploring ways to support access for smaller, rural schools interested in dual credit.
- Researchers are also interested in ways to broaden student-level access and success.
- More work needs to be done to determine ways to address challenge exam low pass rates.

For access to the working paper, click <u>here.</u>

PLAY VIDEO



CONCLUSION

The EPSOs in Action conference provided the space for rich discussion on the current impact of EPSOs, the state of EPSO implementation in Tennessee, and what practitioners would like to see change within the system. In a post-conference survey, participants were asked to indicate their takeaways from the event, and several important considerations emerged.

DISTRICT LEADERS

District leaders stated that their main takeaway was on the importance of wraparound and student support services and their positive impacts of students' early postsecondary success. District leaders acknowledged the difficulty in navigating the EPSO process, financial aid, registration, and other barriers for students. In their conversations, district leaders stated that a main goal would be to look at support services that can be provided for students that prioritize addressing these barriers, while also offering resources to encourage historically underrepresented students to take advantage of EPSO offerings.

SCHOOL LEADERS AND COUNSELORS

School leaders and counselors indicated that transportation issues and misinformation persist, and pass rates for Statewide Dual Credit Challenge exams and AP exams present a challenge for counselors hoping to recommend EPSOs to students. One counselor indicated that she would like her school to hire career coaches to further help students understand the EPSO process. Interestingly, school personnel acknowledged that many students were very interested in taking advantage of EPSOs, but many of the courses students wanted to take weren't offered at their schools.

POLICYMAKERS

Policymakers agreed that there is a clear need to engage students in EPSOs without adding additional stress and rigor that might dissuade their participation. One policymaker noted that Dr. Dougherty's work on CTE pathways pointed to a need to engage learners in things that they can apply to everyday life and that have an authentic purpose. Additionally, policymakers sensed a tension in the differing goals of EPSOs, namely earning college credit and experiencing high-level coursework.

While participation in some EPSOs might increase student exposure to high-level content, students also may not earn college credit. Many policymakers also pointed to the need for balancing priorities when it comes to EPSOs. For example, the alignment between high school and postsecondary coursework patterns remains a concern — partnerships must be constantly fostered and updated between learning institutions to make sure students aren't taking the wrong courses or missing crucial steps towards EPSO success.

As the state continues to engage stakeholders in discussions around EPSOs, the use of research will be important in assessing their overall impact on student postsecondary achievement. Practitioners raised important concerns at this event, and through this conference dialogue, the Tennessee Department of Education hopes to continue improving the current EPSO offerings in the state.

REFERENCES

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. 2012. 10.1002/he.20010.

An, B. P. (2013). The impact of dual enrollment on college degree attainment: Do low-SES students benefit? Educational Evaluation and Policy Analysis, 35(1), 57-75.

Cowan, J., & Goldhaber, D. (2015). How much of a "running start" do dual enrollment programs provide students? Review of Higher Education, 38(3), 425-460.

Giani, M., Alexander, C., & Reyes, P. (2014). Exploring variation in the impact of dual-credit coursework on postsecondary outcomes: A quasi-experimental analysis of Texas students. The High School Journal, 97(4), 200-218.

Hemelt, Steven W. and Schwartz, Nathaniel and Dynarski, Susan M., Dual-Credit Courses and the Road to College: Experimental Evidence from Tennessee (July 2019). IZA Discussion Paper No. 12481.

Shapiro, D., Dundar, A., Wakhungu, P.K., Yuan, X., Nathan, A. & Hwang, Y. (2016, November). Completing College: A National View of Student Attainment Rates - Fall 2010 Cohort (Signature Report No. 12). Herndon, VA: National Student Clearinghouse Research Center

Taylor, J. L., Borden, V. H. M., & Park, E. (2015). State dual credit policy: a national perspective. New Directions for Community Colleges, 169, 9-19.

