

Maximizing CTE as a Tool for Workforce Development

Degree Pathways for CTE Students in Florida

Overview of CTE in Florida

In 2019, Governor DeSantis signed a [workforce bill](#) prioritizing workforce readiness and Career and Technical Education (CTE), which included expanding workforce education into high schools. The following school year, more than 30% of middle and high school students participated in CTE coursework. Today, with over 700,000 students enrolled in a CTE program at the K-12 level, and over 400,000 students enrolled in a CTE program at the postsecondary level, CTE is a [major part of workforce readiness in Florida](#).

In 2019-2020,



30.2%

of middle and high school students participated in CTE coursework...

...an increase of



200%

from the 2011-2012 school year.

CTE assists the state and its workers in responding to changing workforce demands while providing students with multiple options to further their education and earn more money. However, Florida lacks seamless pathways that allow students to transition their CTE credits along the state's higher education pathways. [Some local pathways and articulation agreements exist](#), but without a statewide, seamless pipeline, credentials earned through CTE programs may not transfer to state colleges, limiting students' ability to transfer and earn a degree. Because some workforce credentials may be time-limited, articulation to a degree can reduce unnecessary duplication of effort, training, time, and money in the future.

Florida already has a nationally-recognized [2+2 transfer pathway](#), allowing students to transition seamlessly from a state college to a state university. Students can apply 60 credits earned as part of the AA degree towards a 4-year degree. This pathway increases postsecondary access and attainment. As we continue to expand workforce education opportunities, and students increasingly take CTE coursework at secondary and postsecondary institutions, students need pathways that ensure they do not lose credit for prior learning and can articulate CTE credentials to degrees.

Why Pathways are Essential

Without seamless pathways, transferring schools can be complicated

- The process for transferring credit between institutions is complex. Often, multiple rounds of paperwork are required between the previous and receiving institutions. Although many schools virtually publish their “articulation agreements,” or policies that map courses from one institution to another, the agreements can be confusing and intimidating for students who already don’t feel like they are “college material.”
- In a 2020 [report](#), researchers found that successful transfer students tended to have caring adults who regularly checked in on them. In contrast, many students who failed to transfer both didn’t have a support network and didn’t realize they would need one.

Students and employers benefit from more options

- While most students in CTE programs enroll for job training or to upskill, these credentials are also a stepping stone towards earning a degree. As individuals obtain more education, their probability of employment and median wages rise. Individuals with some college [make](#) more than individuals with a high school diploma, but individuals [earn even more](#) with an Associate’s degree.
- Supporting educational attainment may assist employers in retaining well-qualified employees. Evidence suggests that employers providing financial support for higher education may [increase employee loyalty and retention](#).

Pathways support nontraditional students

- Technical schools and state colleges generally serve [nontraditional students](#), including low-income, first-generation, and minority populations, as well as veterans and adult learners. It is essential that these students are not shuffled into jobs without mobility or at high risk for automation.
- Further, pathways can help attract Floridians who have started but left college, and who may be more likely to experience poverty, unemployment, and income volatility in the future without finishing their credential.

When Floridians earn credentials, the state profits

- The American Action Forum [found](#) that for every 1 percentage-point increase in the portion of a state’s population with at least a bachelor’s degree, the state’s real GDP growth rate increases by about 0.08 percentage points.

ACCORDING TO FLORIDA TAXWATCH,
FLORIDA COULD EXPECT AN ADDITIONAL

\$53.6 BILLION

ANNUALLY IN EARNINGS IF WE HAD
EQUITABLE EDUCATIONAL ATTAINMENT

Promising Practices

Tech Express to Valencia College

Historically, students at Orange Technical College (OTC) struggled to complete the transfer process to Valencia College. In response, OTC and Valencia College collaborated on [Tech Express](#), a program that places Valencia advisors on technical school campuses to guide students in the transfer process. Administrators from both schools built the model based on the Valencia-to-UCF transfer pathway [Direct Connect](#) with the goal that this pathway would benefit their schools, community, and local workforce.

Prior to Tech Express, OTC students received exposure to Valencia whether they had applied, been accepted, or taken a class, but for a variety of reasons never continued. Often, the missing piece was access to advisors who could provide guidance to students and serve as advocates for their continued success. Before Tech Express, about 10 technical college students articulated credit to Valencia annually. Since the implementation of the program, thousands of Tech Express students have enrolled in Valencia programs, earning between 3 and 27 credits.

Pensacola State College

At Pensacola State College (PSC), certificates are embedded in most A.S. degrees so that students have multiple opportunities to earn credentials as they progress through the program. For example, three short-term certificates are included in the Accounting A.S., which means even if students don't finish the program, they may still be leaving with a valuable certificate that prepares them for immediate employment or promotion at work. While PSC has long had embedded certificates, they are increasing in popularity, and are particularly valuable for first-generation students. With their first certificate, many students receive affirmation that they are on a valuable pathway and have an incentive to continue towards a degree.

Embedded certificates mean students gain valuable credentials, even if they do not complete their degree.

PSC works closely with its local technical college, George Stone, to ensure credits articulate so that students have the best opportunity to earn credentials. The institutions also collaborate on programming to meet the needs of the community. When George Stone started an aviation maintenance program in 2015, it quickly reached maximum capacity for students. Aviation is a growing industry in the region, and with a multimillion-dollar expansion at the Pensacola International Airport, over 1,000 jobs will be created. To meet the needs of the community, PSC decided to start its own program, but the schools are collaborating rather than competing. Both George Stone and Northwest Florida State College have shared their equipment and curriculum with PSC to ensure that they are working together to increase opportunity for their community.

Recommendations

Expand statewide articulation to include career pathways

Florida can look to its nationally recognized 2+2 transfer pathway and statewide common course numbering system that eases transfer at state colleges and universities. The pathways are successful: 50% of AA graduates from Florida's two-year colleges in 2018 successfully transferred into a state university two years later.

To bring the same system to CTE students, the Articulation Coordinating Council could look to expand the pathways to include CTE programs, using either local articulated frameworks or the process used to provide standardized credit for military education to ensure CTE students earn college credit for their credential. This update would align with the efforts of the Credentials Review Committee, which is working to ensure students have access to stackable credentials.

Institutions can work together to create student-centered CTE pathways

Partnerships such as Tech Express between state and technical colleges create opportunities for students and institutions. Rather than competing for students and funding, institutions can come together to meet the community's needs. Institutions also work closely with local industries to ensure students are gaining relevant content that will enable them to be successful in the workforce.

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A student-centered CTE pathway has several key components, including aligned advising, clear and understandable articulation agreements, and commitments from each institution to give students as many options as possible. Aligned advising has several benefits, such as increasing students' awareness of the various pathways ahead of them and how their credits may transfer. [Research shows](#) white and Asian students have better employment and earnings outcomes from state and technical college programs than Black and Hispanic students, generally because white and Asian students tend to be in fields of study that offer pathways to jobs with higher wages. Aligned advising is one strategy by which all students can understand affordable and accessible pathways towards high-paying fields, increasing employment and earnings outcomes.

More data transparency is needed to report on access, participation, and outcomes of CTE students

As a part of [HB 1507](#), the state will soon track and publish access, participation, and outcomes of CTE students. Real-time transparent data is also needed to understand where limited resources should be funneled. Students, policymakers, and other stakeholders should have access to indicators of quality and return on investment for CTE programs. Metrics must validate that institutions provide students with adequate access and support throughout their education.