



Case Study: Tech Express to Valencia College

An innovative collaboration between two technical colleges and a state college in Central Florida streamlines student pathways from CTE to degree.

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EXECUTIVE SUMMARY

Career and Technical Education (CTE) is an important part of talent-readiness in Florida. Four of the Top 10 fastest growing jobs in Florida require a postsecondary certificate, and technical schools are working to create the skilled workforce needed for Florida's future economic growth.¹

However, the COVID-19 pandemic has shown the divide between Floridians with and without a degree. Thirty-five percent of Florida workers who have had their pay negatively impacted by COVID-19 said they would need additional education or training to find work with the same wages or income.² One way to nimbly prepare Florida workers for better-paying jobs is through a strong CTE-to-degree pathway.

To ensure CTE graduates have opportunities for stable, high-paying jobs, technical schools have agreements with community colleges to support CTE students in pursuing degrees. Many CTE graduates have earned credits towards a degree-granting institution, yet many technical students never transition because the transfer process can be confusing and frustrating.

Tech Express to Valencia College offers a solution. Tech Express started as a partnership between Orange Technical College (OTC) and Valencia College. Both schools, serving the Central Florida area, noticed about only ten students a year were transferring from OTC to Valencia, taking their credits with them. This meant that hundreds of CTE graduates a year were missing out on a pathway to a degree. Leadership from both schools, agreeing clearer transfer paths were needed, created a collaborative partnership to construct a straightforward support system for students who may typically fall between the cracks. The partnership now includes Osceola Technical College and reaches new students every year.

Our research identified three main findings:

1. Tech Express offers a promising model where students can seamlessly move from technical school to community college, while earning stackable credentials aligned to local workforce needs.

CTE to degree pathways are not limited to traditional trades. Tech Express programs work in partnership with local industry across varied and cutting-edge fields such as 3-D Animation Technology, Cybersecurity, Desktop and Mobile Support Technology, and Mechatronics, among others.

2. Collaboration is a win-win for both partner institutions.

Institutional leadership established and promoted the mindset that Tech Express is a win for students and all involved. Moving beyond the mentality that technical schools and community colleges are competing for students and funding, the two schools came together to meet the needs of the community.

3. Community college advisors on technical school campuses provide critical information to students about opportunities for transfer and articulation.

Valencia advisors' offices are on technical school campuses to provide accessibility, and the advisors quickly pivoted to remote advising during the COVID-19 pandemic. Their availability ensures technical students know the options ahead of them and are aware of how many credits they already have earned if they want to continue at Valencia. Tech Express advisors further visit every classroom, present at high schools and in the community, and work closely with professors to advertise the program and its benefits.

Florida College Access Network's *Case Study: Tech Express to Valencia College* illustrates how institutions can partner to strengthen the seamless transfer of technical school students to two-year degree institutions. The partnership supports students along their pathway and guides them towards stable, well-paying jobs that these students want and deserve. Florida is already known for its innovative 2+2 transfer agreements, and Tech Express demonstrates how Florida can further lead in "CTE to degree" pathways.

INTRODUCTION

For Florida to build a strong, recession-proof economy, all Floridians need education and training after high school and opportunities for lifelong learning. This is particularly pertinent in the aftermath of the 2020 COVID-19 pandemic, with tens of thousands of Floridians out of work and in need of skills and training for the jobs of tomorrow. Nearly 80% of Florida voters agree that everyone needs to complete an education beyond high school, and 91% support efforts to make education after high school more accessible.³

While the Florida Department of Economic Opportunity suggests two out of every three jobs created by 2025 will require a postsecondary degree or credential, only 52% of working-age Floridians hold one.⁴ The Great Recession resulted in the permanent loss of many low-skill jobs, and those with less education face greater disadvantages during economic challenges. In the post-pandemic world, the majority of jobs will require a postsecondary education, yet there are not enough workers with the skillsets to fill anticipated workforce needs.

Recognizing this need, Florida education systems and institutions are stepping up to the challenge by building more education pathways to careers in high-demand fields. This paper profiles an especially innovative partnership in Central Florida that combines strong ties between education and business, clearly-defined pathways for students, and active advising and outreach to ensure students know their options and have support in choosing the education opportunities that help them achieve their goals.

FCAN'S SEVEN CONDITIONS FOR SUCCESS

These conditions guide our work and provide a lens through which to identify opportunities to achieve Florida's talent goals.



The Florida College Access Network (FCAN) promotes policies and practices that hold the greatest promise to achieving our mission to boost educational attainment. FCAN has developed Seven Conditions for Success to guide our work and provide a lens through which to identify opportunities to achieve Florida's talent goals. The Tech Express partnership spans across all seven conditions, but in particular, is based upon **expanding opportunity for everyone**, using **clear information and guidance** through its advising philosophy, by **promoting multiple pathways to success** across different types of schools. FCAN believes that through Tech Express, these three conditions work to create a resilient workforce and spark economic mobility.

CTE TO DEGREE: HOW CENTRAL FLORIDA PARTNERSHIPS BUILD PATHWAYS TO CAREER MOBILITY

Most of Florida's fastest growing occupations require a college degree or workforce credential, and Career and Technical Education (CTE) can be an affordable way for Floridians to earn high-quality certifications.⁵ Increasingly, CTE is closely integrated with local business to prepare students for labor market needs. Many programs challenge the perception that technical school is a dead-end path, taking students into low-paying, menial jobs without growth potential. Instead, with opportunities like Tech Express to Valencia College, students at technical schools have the chance to earn multiple certifications in growing industries that seamlessly "stack" toward college degrees.

Florida is deeply committed to CTE. In 2019-20, despite the COVID-19 pandemic, 30.2% of Florida's entire middle school and high school population participated in CTE coursework – a 200.04% increase since 2011-2012.⁶ Floridians also earn postsecondary workforce-relevant credentials through 48 school district-operated technical colleges/centers and 28 Florida College System institutions. In 2019-20, 55,237 students enrolled in a career certificate program, an applied technology diploma program, or an apprenticeship program through a district-operated technical center. Additionally, more than 181,048 students enrolled in a postsecondary CTE program at a Florida College System institution. These included associate of science or associate of applied science, certificate, career certificate, apprenticeship, and advanced technical certificate programs.⁷

ARTICULATION AGREEMENTS

An agreement between two or more educational systems, articulation agreements help students transfer seamlessly between institutions, taking their earned credits with them. Articulation agreements are based upon guidelines, policies, and accreditation principles. Clear articulation agreements ensure students' incoming courses map towards a specific degree program, avoiding unnecessary repetition.

A MODEL FOR "STACKING" CREDENTIALS TOWARDS EARNING A DEGREE

Launched in 2016, Tech Express was the result of multi-year discussions between Orange Technical College (OTC) and Valencia College. The idea of Tech Express is simple: a Valencia advisor is placed on an OTC campus to guide students completing approved technical programs towards continuing at Valencia, taking credits toward a college degree with them.⁸ The partner institutions work to develop clear pathways called "articulation agreements" from specific CTE programs to complementary degree programs at Valencia.

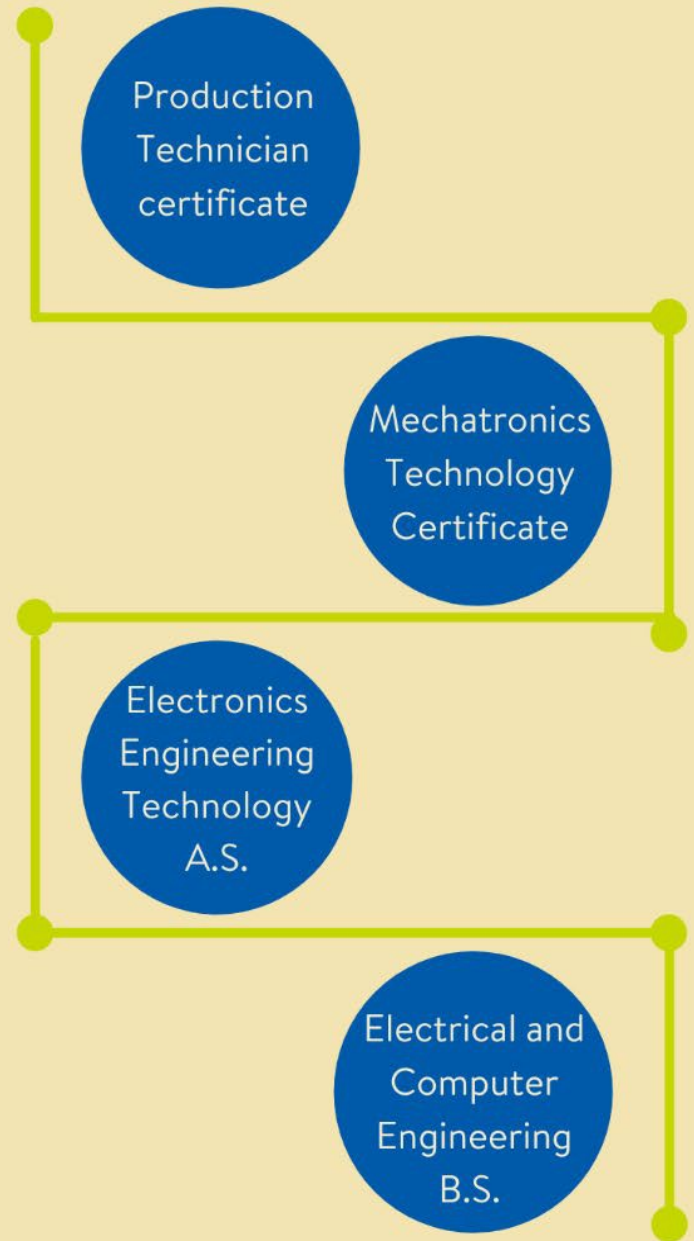
For example, a student finishing a masonry apprenticeship would be informed that if they would like to further their education, they have earned 27 credits towards an Associate of Science in Supervision and Management for Industry at Valencia. This degree gives students skills to run their own business or move into leadership positions within their trade. If the student wants to continue even further, Valencia offers a Bachelor's degree in Business and Organizational Leadership. How far the student goes on this journey is up to them, but they will always have stackable credentials to build upon.

Beyond helping students obtain degrees, Tech Express' simplified pathways support retention at OTC, as completing the technical program is required to earn transferable college credit. These agreements between the two colleges are guided by local employers, who inform program development to ensure students develop the skillsets needed to succeed in the workplace.

Tech Express offers a model for collaboration to ensure students benefit from education pathways that advance their careers, while providing industry with a robust talent pool. Many students in CTE programs earn certificates or certifications—short-term or industry-recognized credentials—and quickly enter the workforce. The strength of this partnership gives students immediately entering the workforce the ability to return to Valencia and receive earned credits. These stackable credentials are an important avenue for providing options for students to seamlessly move between educational systems, maximize credit attainment, and create pathways towards future degrees and better jobs.

Osceola Technical College's Placement and Follow-Up Coordinator remarked, "For a period of time, it was a this or a that – do you go to tech school, or do you go to college? With Tech Express, our students know that you can have both."

STACKABLE CREDENTIALS

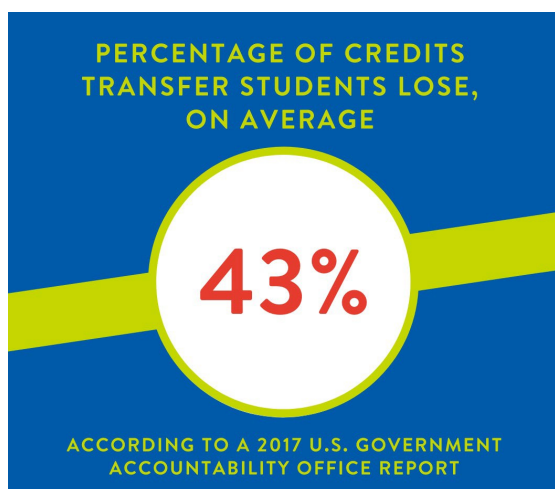


Joining or leaving the pathway at any time, students have multiple options to stack credentials, certificates, licenses, apprenticeships, and degrees that enhance their value in the workplace.

HOW IT WORKS

As a longstanding practice, leadership from OTC and Valencia held monthly meetings to discuss partnership collaboration and best practices in preparing students for the workforce. In 2014, leadership focused on ensuring smooth transition from OTC to Valencia in order to meet the education and employment needs of students and the community. Agreeing that successful articulation from OTC to Valencia benefits both institutions and the local workforce, leadership from both schools worked together to ensure OTC students completing an articulated technical program or industry certification could leverage them as college credit toward specific degrees in their fields. To support a smooth transition between institutions, students needed targeted information and guidance.

When students cannot seamlessly transfer between systems, students lose money and time.⁹ From a policy perspective, Florida has led the nation in addressing this issue. In 1971, Florida established the nation's first legislatively mandated articulation policy between state or community colleges and state universities. The state has since expanded the policy to include transitions from technical schools into the Florida College System. However, many students were not aware of these articulation agreements.



According to a Tech Express advisor, for many students, education was not the best experience in their life, and many do not believe they are “college material.” When articulation agreements are not visible, navigating the complex process of transferring from one institution to another can make a student who is unsure of their college abilities feel overwhelmed and give up. With this in mind, OTC and Valencia realized that an intentionally guided pathway could strengthen their already-existing articulation agreements.

Enter Tech Express. In late 2016, advisors from Valencia were placed on OTC campuses. Their primary role was to make it easier for technical college students to transition to Valencia with earned college credit. Rather than navigating a mystifying process alone, with the guidance of a knowledgeable and supportive advisor, OTC students could traverse a seamless path to further their education.

Beyond articulation agreements, Tech Express is a true partnership: Valencia advisors visit OTC classrooms, attend community events, and work with OTC career services to broadcast the transfer opportunity. Many students go directly into the workforce after completing their technical program, but Tech Express advisors help students visualize working while taking classes towards a degree to increase future earnings potential. The enhanced partnership further works to align articulation agreements and the curriculum of OTC programs with local industry needs.

STUDENT SPOTLIGHT:

Nick Ziehn



When Nick Ziehn, an HVAC refrigeration technician at Disney, graduated from his OTC HVAC apprenticeship and earned his industry EPA 608 Universal Certification, he received an email from a Tech Express advisor that he at first thought was spam. The email said he could use his credits from his apprenticeship towards a degree at Valencia. Nick's credits qualified for two different degrees, but he was most interested in the new Energy Management and Controls Technology (EMCT) A.S. program.

At the time, Nick did not know what he wanted to do next. While he never thought of himself as a good student, Nick was intrigued by the opportunity to work while getting a degree. He read a little bit about the EMCT program and realized it could help propel him on a new career path at Disney.

Despite balancing work, family, and now school, Nick found the program fascinating. Adding the internship required for the degree to his already-busy days was sometimes difficult, but Nick felt energized, because he loved the new opportunities. "I was working exhausting hours but I felt great; I was excited because of the absolute challenge."

Nick worked hard to get his HVAC refrigeration technician apprenticeship, and because his apprenticeship credits transferred so easily, Nick is now on a new pathway that he had never imagined. He had previously turned down a leadership opportunity at Disney because he did not see himself as leadership material. Now, he feels differently. "There's a director of one of our departments; that'd be neat to get to his place sometime. I never thought that was possible, but now I'm starting to believe maybe it is possible that I could be in his role someday."

PARTNERING WITH LOCAL INDUSTRY TAILORS CURRICULA TO WORKFORCE NEEDS

Clearer pathways and enhanced student support are an issue of equity. Because technical schools and community colleges generally serve nontraditional students, including low-income, first-generation, adult learner, veteran, and minority populations, a partnership such as Tech Express is uniquely positioned to advance equity in learning and in the workforce. It is essential that these students are not shuffled into jobs without mobility or at high risk for automation. Tech Express offers affordable pathways and unveils opportunities for relevant and high-paying jobs for students who might not otherwise see themselves as so-called “college material,” or who may have never envisioned career growth as an opportunity available to them.

Since its inception in 2016, Tech Express put two institutions, typically in friendly rivalry for students, in collaboration. Valencia has also previously had existing agreements with nearby Osceola Technical College (oTECH), and additionally provides oTECH with access to a Tech Express advisor and the opportunity for students to transition to Valencia’s A.S. programs. In 2017, there were 75 Tech Express students identified at Valencia. As of Spring 2020, 68 Tech Express students have graduated with Valencia degrees. Because many Tech Express students work and go to school part-time, Valencia estimates an average time-of-graduation of around five years. Consequently, the partnership anticipates a steady increase in completions in the next several years.

Before Tech Express, about **10** technical college students articulated credits to Valencia annually.

After Tech Express, as of Spring 2020, **890** Tech Express students have enrolled in Valencia programs.

Tech Express leaders have intentionally worked with industry leaders to adapt their curriculum and partnerships to local workforce demands. Central Florida is a region that is vibrant and growing, and with growth comes opportunities for students who want to stay close to home. The articulation agreements from OTC to Valencia span a range of programs including the skilled trades, healthcare, cybersecurity, game and simulation animation, among many other fields.

What is good for the local workforce region is good for the partnership. To strengthen relationships with industry leaders, the partnership consistently asks: who else should be at the table? How can we build and maintain relationships to strengthen the pipeline? How can we update existing and/or develop new curriculum to meet the needs of local employers?

One example of program development based on growing local industry need is Valencia’s Energy Management and Controls Technology A.S. program. Created in 2018, the program prepares workers to operate smart buildings and reduce energy usage. The first of its kind in Florida, Valencia partnered with OTC to establish this program in consultation with local employers including Siemens, Automated Logic, Trane, and Honeywell. The employers additionally committed to hiring Valencia students for internships that lead to jobs. Tech Express advisors assist students in multiple programs at OTC with transferring up to 12 earned credits towards the EMCT A.S. program at Valencia.

Even though Tech Express is highly tailored to workforce needs in the Orlando area, it has lessons for other regions interested in similar programs. Most technical schools have industry councils that consist of industry professionals that meet regularly to review and update curriculum. To make those councils even stronger, Tech Express is working on integrating those councils in the partnership between the technical schools and Valencia. When the advisory councils meet throughout the year, they can alternate at the different schools and work closely with partnership advisors to ensure curricular updates are consistent across both schools. Further, other potential partnerships should lean on the connectedness of their instructors, many of whom come directly out of the industry and know their field best.

Partnerships like Tech Express can and should be fine-tuned to each individual workforce region. Ultimately, the program can be an easy sell to local industry leadership. In order to strengthen talent that goes into the workforce pipeline, industry should be involved in ensuring that curriculum is tailored to local needs. In doing so, partnerships like Tech Express foster shared responsibility for preparing students to enhance their skills and gain new options in life.



COLLABORATION IS A WIN FOR BOTH INSTITUTIONS AND THEIR STUDENTS

From the beginning, authentic collaboration from OTC and Valencia leadership helped mitigate longstanding competition between the institutions. By prioritizing trust and reciprocity, over a few years' time they established a partnership where two historically competitive institutions would interact as one. Because the program's primary goal was to meet the needs of students and the community, Tech Express started with a long-term commitment to fund the advisors as permanent positions, knowing the schools may not see immediate results.

The two schools collaborated on intentional marketing to promote the transition from OTC to Valencia. Designing a logo that represents both schools and the pathway in between, the schools created visual and digital media to expand their presence and marketed their shared articulation agreements.

Further, the advisors worked to establish relationships with instructors, faculty, staff, and administration between the two schools, to solidify the partnership and its shared focus on student success. As a result, Tech Express advisors work as the face of Valencia but are embraced as part of the OTC family. It is part of the advisors' job to stay in communication with instructors and Valencia faculty to ensure existing agreements are up to date, to find new opportunities to create agreements, and bring the parties together to develop more agreements. As articulations and pathways grow, the partnership grows too.

The partnership continues to adapt when it sees opportunities for growth. For example, when Valencia did a survey to understand where students hit barriers in the transfer process, they found the most critical moment for a student in transition is the application. Not only are applications often complicated and intimidating, they may also require a fee. With the support of leadership, Valencia found a way to waive the fee for Tech Express students. Since that change, applications have increased.

ACCESSIBLE ADVISORS HELP STUDENTS NAVIGATE THE TRANSFER PROCESS

Central to the program's success are advisors who are both accessible and highly visible to students. Early in the partnership, the advisors never said no to a chance to participate in an event where they could share the program with students. Their physical presence at apprenticeship offices, career fairs, parent nights, community events, high schools, and within OTC classrooms reminds students of the opportunity to further their studies. Additionally, by showcasing the opportunities of a technical certification that can be easily "stacked," Tech Express advisors incidentally act as recruiters for OTC.

One key to the partnership is the advisors' physical placement in proximity to OTC career centers. This enhances their visibility and sends a message to students that both the job market and education are options for their future. Additionally, their presence makes it convenient for students to explore opportunities at Valencia without leaving the OTC campus.

Today's technical student has a diverse educational background, and advisors always work to meet students where they are. Many OTC students have had exposure to Valencia, whether they have applied, been accepted, or taken a class, but for a variety of reasons never continued. Often, the missing piece was access to advisors who expose and provide guidance to students about their opportunities and serve as advocates for students' continued success.

The advisors hold multiple roles. Because technical colleges enroll new students regularly, advisors work closely with instructors and present in every classroom. Advisors further attend program advisory meetings with business and industry partners to establish buy-in towards the partnership from the local community. Often, workforce leaders that hire OTC students encourage them to continue their studies utilizing Tech Express.



COLLABORATION BENEFITS THE STUDENTS, THE INSTITUTIONS, AND THE LOCAL WORKFORCE

Building a resilient Florida economy after disruptions like COVID-19 requires strengthening our workforce and closing opportunity gaps for education and training, so that Florida workers can nimbly adapt and thrive despite a changing landscape. We need to prepare students to find the right post-secondary path for them, whether that is high-quality technical training, a certificate program, or college.

Tech Express is a model for the sort of innovative programming that can result when institutions and industry work together to create education pathways to high-demand fields. By emphasizing long-term success over short-term wins, the two schools have further strengthened a partnership based on trust. Through the partnership with local businesses, the two institutions have developed education pathways to help build a robust regional workforce.

By helping students see that there are various opportunities to gain the skills needed for a rewarding career, Tech Express showcases multiple career pathways. With guidance, many students realize that technical school does not have to be the final destination. Stackable credentials provide pathways with on- and off-ramps towards future credentials, certifications, and/or degrees. Students just need someone to help them see the possibilities for their future.



Notes:

- ¹ Florida Department of Economic Opportunity, Bureau of Labor Statistics (2016).
- ² [Florida College Access Network survey, June 2020.](#)
- ³ [Florida College Access Network survey, March 2020.](#)
- ⁴ Florida Department of Economic Opportunity, Bureau of Labor Statistics (2016).
- ⁵ Florida Department of Economic Opportunity, [2019-2027 Statewide Fastest-Growth Occupations Employment Projections \(2019\).](#)
- ⁶ Florida Department of Education, [Career and Professional Education Act Enrollment and Performance Report: Program Year 2019-2020 \(2020\).](#)
- ⁷ Florida Department of Education, [Career and Adult Education Quick Facts \(2020\).](#)
- ⁸ The program was inspired by the success of [DirectConnect](#), a transfer initiative between the University of Central Florida and several Central Florida colleges, including Valencia College. The program guarantees admission to UCF for students who complete an associate degree. To combat the often-frustrating or overwhelming transfer process, UCF advisors are placed on community college campuses to help the transition from community college to a four-year school.
- ⁹ United States Government Accountability Office, [Higher Education: Students Need More Information to Help Reduce Challenges in Transferring College Credits.](#) Report to Congressional Requesters. Washington, DC: United States Government Accountability Office (2017).



Florida College Access Network (FCAN) is Florida's first collaborative network committed to ensuring all Floridians have the opportunity to achieve an education beyond high school and prosper in Florida's dynamic economy. FCAN leads the collaborative movement to ensure every Floridian achieves an education beyond high school and a rewarding career. We envision a Florida working together where education is the pathway to economic mobility for all.

As a nonpartisan organization, FCAN strives to expand knowledge of research, data, policies and practices that impact postsecondary access and attainment in Florida. This report is intended as an educational resource.

FCAN is a statewide organization hosted by the University of South Florida System (USF). The statements and positions presented are those of FCAN and are not made on behalf of the USF Board of Trustees or intended to be in any way be representative to USF.

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