

# SAVING HANDS-ON TRAINING DURING COVID-19

**A Guide for the Future of Career  
& Technical Education**



# Case Study Timeline: Passage to Pandemic

New "Altierus" brand launched for school system  
Innovation School Model formulated

Updated, blended online curriculum developed  
Digital campus experience implemented

"All-Inclusive Training" platform established  
HVAC virtual reality training piloted

**COVID-19**  
Operational processes adapted  
Full online learning enabled

Students return to campus on modified schedule  
Leadership reevaluates operating model

2017

2018

2019

2020

PRESENT

## Essential Workers, Essential Training

### SITUATION

*Career & Technical Education at Risk*

The coronavirus (COVID-19) pandemic catapulted the American higher education system into uncharted territory. While some institutions had viable fallback operations in place, others did not. Overall, instructors and students were left reeling and confronting uncertain futures.<sup>1</sup> Career and Technical Education (CTE) institutions, which have historically relied heavily on an in-person and hands-on modality, had to confront an even higher hurdle: *how to continue providing education at all.* It became the ultimate stress test. Despite this challenge, a CTE school system, Altierus Career College, demonstrated an ability to adapt and thrive during the COVID-19 crisis. From this emerged a valuable set of lessons for reshaping the education-to-workforce model.

### OPPORTUNITY

*A Growing Retraining Need*

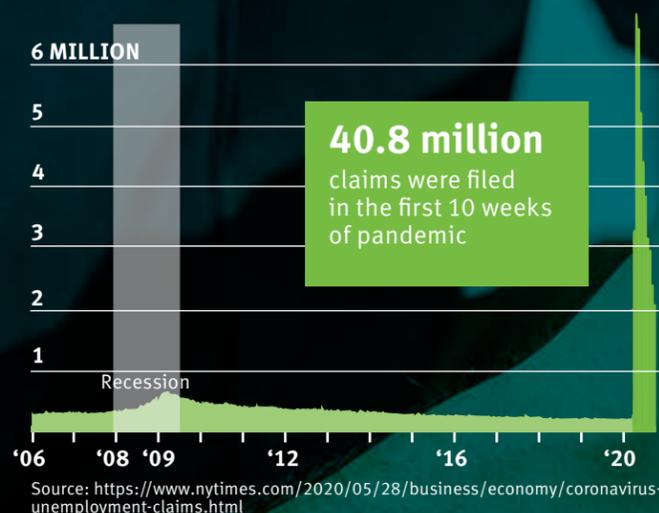
Career and Technical Education careers comprise many essential, frontline jobs, defined during the COVID-19 crisis as people in roles needed to maintain operations of critical infrastructure sectors, such as healthcare, energy and transportation. Amidst a backdrop of skyrocketing unemployment, failing to train new professionals during the crisis would only exacerbate a pre-existing condition: *a widening shortage of middle-skill workers.* In other words, the opportunity for continuing to train CTE workers remained imperative.



**>2x Graduation Rate**  
vs. national community colleges

### Initial Jobless Claims, Per Week

*Seasonally Adjusted*



## TECHNOLOGY PREPAREDNESS LEADS TO PERSEVERANCE

*The Path to Innovation*

In 2017, ECMC Education embarked on a vision to redefine Career and Technical Education (CTE). Through its newly established Altierus Career Colleges, a nonprofit CTE school system with locations in Atlanta, Houston and Tampa, the ECMC Education leadership team formed an open-source Innovation School Model to serve as its north star. The model became a blueprint for reengineering the entire educational experience with transformative ideas and technology illuminating the way—all centered on positively impacting student outcomes. Funding from the ECMC Foundation, an organizational affiliate with a shared mission, helped lay the groundwork of a newly digitized campus experience.

By the end of 2018, every program had been rewritten for blended, online delivery that not only included live video lectures but interactive and simulation-based activities as well. In 2019, the school introduced an "All-Inclusive Training" offering, which holistically equipped students to thrive in their journeys and bolstered their support services. Standard tuition increasingly covered formerly optional items, such as an iPad, enabling students to take advantage of online learning modules. Tuition also included certification preparation and testing fees, professional skills curricula, industry-specific gear for use on the job and more. By the end of 2019, the schools achieved graduation rates greater than double those of national community colleges and career placement rates rose above 75 percent.

When the COVID-19 pandemic forced the closure of all campuses in March 2020, Altierus had embarked on the next phase of its Innovation School Model: adding an employer-propelled, talent development capability. This capability would be critical for maintaining bright prospects for our graduates and for continuing to deliver on employers' highest needs. These efforts grew stronger in the months to come.



"Adopting an innovative mindset years in advance—and taking action on it—helped us quickly adapt to student needs in a new operating model."

—Jacob Kassuba, VP Campus Operations

# MAKING A POSITIVE IMPACT IN CRISIS CONDITIONS

## Leadership Mobilizes Online Capabilities

With the technology infrastructure and part-time online coursework put in place in prior years, campuses were able to shift to fully remote, online courses in a matter of days. Proactively equipping students, faculty and staff with iPads and technology well ahead of COVID-19 made the transition seamless. While technology played a large role in maintaining continuity for students, it was an instilled sense of leadership and responsibility among faculty and staff that made it possible. Additionally, training and coaching opportunities helped shore up remote instructional and operational competencies, while outreach to accreditors, state regulators and federal agencies helped gain alignment on flexible guidelines for maintaining compliant educational delivery.

## KEY ACTIONS TAKEN

### 1. IMMEDIATELY TRANSITIONED FULLY ONLINE

Shifted instruction and operations to 100% remote format and closed campuses (all students previously equipped with iPads)

### 2. KEPT CLOSE PULSE OF EVOLVING STUDENT NEEDS

Conducted weekly student well-being surveys for prioritizing key actions and resource deployments

### 3. AUGMENTED STUDENT SUPPORT

Doubled availability of emergency student funds and widened access to personalized support services

### 4. MAINTAINED VIRTUAL COMMUNITY

Accelerated adoption of campus-specific social media networks

### 5. AMPLIFIED COMMUNICATIONS

Reinforced details of operational changes early and often to students, faculty and staff

### 6. EMPOWERED LEADERSHIP AT ALL LEVELS

Made open calls for nimble workaround solutions to replace in-person activities

### 7. ENACTED VIRTUAL FINANCIAL AID PROCESS

For new students, streamlined admissions steps with automated tools and personalized video consultations

### 8. BROUGHT AUXILIARY PROGRAMMING FORWARD

Re-engaged students with online tools and at-home exercises for continued professional skills development

### 9. EXTENDED DIGITAL ACADEMIC CAPABILITIES

Partnered with curriculum vendors on new simulations to remotely perform lab exercises

### 10. PREPARED FOR PARTIAL REOPENING

Quickly reengineered campuses to exceed CDC guidelines and arranged small lab cohorts

### 11. SAFELY RESUMED COMPETENCY CHECKS

Enabled students to schedule competency checks with faculty in a safe, one-on-one and small group setting

### 12. STREAMLINED EMPLOYER PARTNERSHIPS

Moved student interviewing and internship processing online while developing safe work arrangements

# STUDENT OUTCOMES

## STUDENT EXPERIENCE

Overall Student Satisfaction **93%**

Access to Tools for Success **87%**

Instructor Preparedness in Remote Environment **91%**

Weekly Attendance Rates **90%**

## NEW STUDENT INTEREST

New Enrollments: 2020 vs. 2019 **+11%**

All data is from March to June 2020

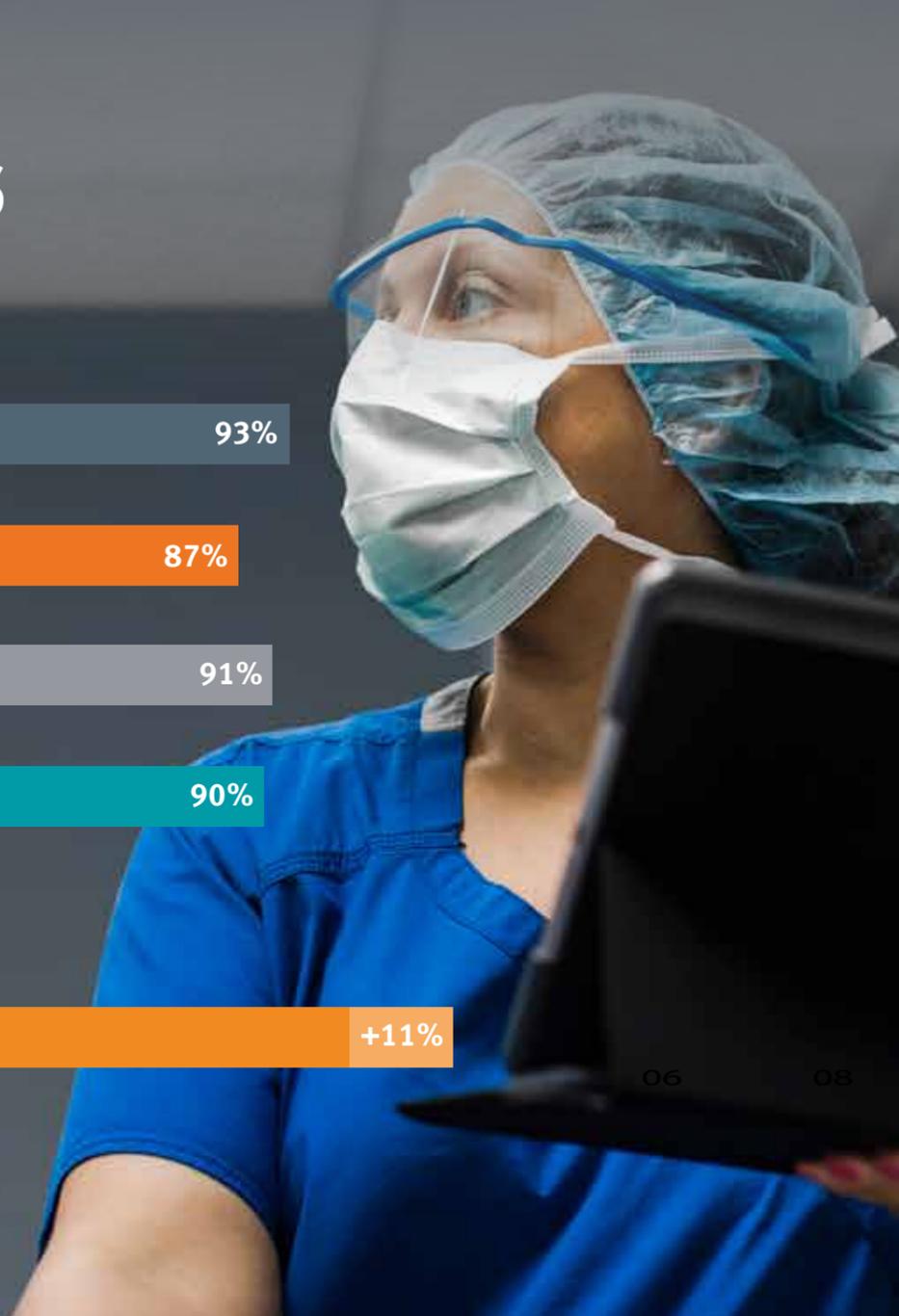


“Faculty and staff were extremely inventive in adapting to a full online format, and it made all the difference for students.”

—Dr. Jennifer Erpelding, VP Academic Affairs

## INGENUITY IN ACTION

- Campuses created a student ‘drive-through’ experience for new students to pick up iPads and course materials
- Employer partners guested in online lectures to share field experiences with students
- Trades faculty demonstrated key concepts on their home HVAC and electrical systems over video
- Faculty in the Medical Assistant program demonstrated blood draws, blood pressure readings, weigh-ins and more with family members or on a buddy system basis
- Students in the Pharmacy Technician program practiced preparing prescriptions by leveraging drawing tools and interactive functionality native to our learning platform
- Dental Assistant instructors developed additional online simulations for practicing ‘chairside’ prep of dental trays and periodontal procedures via computer
- Nursing students began conducting virtual clinic excursions, complimented by online case scenarios, conversations and interactions



# LESSONS LEARNED | CURRENT ACTIONS

*Experience Reinforces Key Principles*

## **Flexible learning environments must become the norm: *Continually push the frontier***

Contrary to those who have raised the specter of a post-coronavirus “backlash against online education”<sup>2</sup>, this major shift to distance learning can prove to be a force of good that endures long past the pandemic, specifically greater access to high quality education at a lower cost with improved completion rates. That is, there is greater opportunity than risk in embracing the online learning paradigm.

**Altierus Action: Permanently codifying courses to heightened levels of online and digital instruction**

## **Innovation is a cultural mindset, not a discrete activity, taking time to build: *Start now***

Organizations talk obsessively about the importance of innovation. The most important principle is simply starting on the journey. Learning quickly from missteps, building upon successes and creating a shared sense of ownership will lead to breakthroughs in due time.

**Altierus Action: Investing in additional virtual reality capabilities and reengineering campus operations to an ‘open lab’ format**

## **Leaders must be operational visionaries: *Empower them as such***

Educational institutions have historically been slow to evolve their ways. It is time to promote the change-makers instead of the status-quo preservers. Look for these individuals in your organization and build them up.

**Altierus Action: Elevating profile of key personnel as a result of their initiative during COVID-19**

## **Community is as important online as on campus: *Meet students on their terms***

The campus experience needs to flourish beyond the defined times when students are present on its premises. Building a thriving, private online social network has the power to extend community, help identify student needs on their terms and foster an overall better experience.

**Altierus Action: Adding full-time personnel to virtual community building efforts in 2021**

## **The silos between education and business must come down: *Open the aperture***

Policymakers cannot ignore this opportunity, and accreditors can maintain their robust quality standards while relaxing requirements to encourage more collaboration between educational providers and industry. Agencies tasked with distributing workforce training funding can also help by making targeted investments in efforts to this end.

**Altierus Action: Building new business venture, Altierus Training Solutions, aimed at employee upskilling for organizations facing workforce talent shortages**

Education—like so many institutions—will be sorted by those who can quickly adapt and those who don’t. Educational quality must simultaneously remain front and center.

—Todd Steele, President of ECMC Education

## VR Pilot-HVAC

*September 2019 - March 2020*

- 30 active students
- 13% increase in academic performance
- 20% increase in skills confidence



## FUTURE IMPACT

*Doubling Down on the Future of CTE*

During economic downturns, Americans tend to go back to school. The Great Recession in 2008 led to a 33 percent increase in enrollment at two-year colleges. And with COVID-19 likely to permanently reshape the American workforce, CTE’s ability to quickly adjust curricula and prepare faculty to fill skills gaps will serve the needs of both workers and businesses.

The pandemic has caused organizations in every industry to rethink, retool and begin the process of rebuilding for the “now” normal as well as the “new” normal of the future. To leverage this opportunity, we have to become more comfortable blurring the lines between education and industry to create opportunities that we have found to benefit learners—both at the postsecondary level and within employer ranks where workers may need new skill development. In addition to educational institutions increasing their tolerance and investment in remote learning, businesses can begin identifying and invest in ways to deliver hands-on training in parallel at their sites—instead of relying on traditional learning at a centralized campus. A combined, dynamic effort between education and industry holds tremendous promise over the linear, sequential and siloed efforts of the past.

ECMC Education and Altierus Career College are modeling new possibilities on this future frontier. Remote learning and open lab scheduling will become a standard feature. Investments in competency simulations and virtual reality are certain. Integrated training programs with employers will become a requirement. With involvement from employers, educators and industry, our objective is to forge a new educational delivery model that decreases the friction from training-to-workplace, reduces the overall cost and continues to improve outcomes.

# MORE ABOUT ALTIERUS

Additional Outcomes and Demographical Data<sup>3</sup>

## KEY PERFORMANCE INDICATORS



**36%**

GROWTH IN  
NEW STUDENT  
ENROLLMENT



**1,029**

LEARNER  
POPULATION



**68%**

COMPLETION/  
GRADUATION RATE

COMPARED TO **32%**  
FOR NATIONAL  
COMMUNITY COLLEGES<sup>1</sup>



**76.5%**

PLACEMENT  
RATE

(+2.5% YOY)

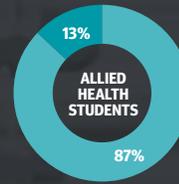
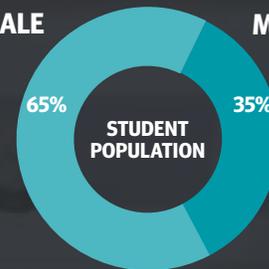
## STUDENT GENDER AND AGE



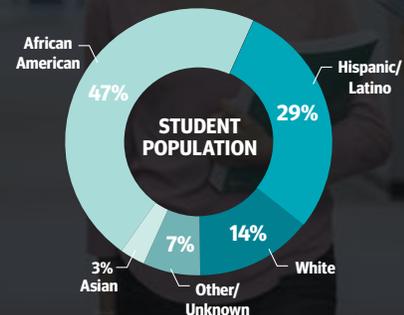
FEMALE



MALE



## STUDENT DIVERSITY



Performance statistics are based on internal analyses and 2019 data reported to ACCSC.

<sup>1</sup> <https://aftvoices.org/college-students-faculty-and-staff-are-reeling-from-coronavirus-shutdowns-3986a017f6e6>

<sup>2</sup> <https://www.insidehighered.com/views/2020/04/01/how-higher-education-can-overcome-crisis-induced-backlash-against-online-education>

<sup>3</sup> U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Winter 2017-18, Graduation Rates component. See Digest of Education Statistics 2018, table 326.20.

**ECMC**  
Education



For more information visit [ecmceducation.org](https://ecmceducation.org)