Industry Cluster Innovative Academies (ICIA) are open-enrollment secondary schools that offer applied learning opportunities for students in high-demand career pathways statewide. Launched in 2017, ICIA campuses partner with businesses, community colleges and universities to strengthen high school preparation that leads to opportunities in thriving local industries. Designed to augment existing Early College High Schools, these campuses provide students with industry certification(s), 60 hours of college credit and/or an associate’s degree by the time they graduate from high school.

ALIGNING STUDENT PREPARATION FOR WORKFORCE SUCCESS

The ICIA program is supported by the Tri-Agency Workforce initiative: a collaboration between the Texas Education Agency, the Texas Higher Education Coordinating Board and the Texas Workforce Commission to support student success and fuel the Texas workforce pipeline.

In the first year of ICIA implementation:

- Established 18 ICIA campuses
- Awarded $7.6M in grant funding
- Engaged 25+ industry partners
- Impacted 1,100+ students
HIGH-SKILL, HIGH-WAGE, HIGH-NEED CAREER PATHWAYS

ADVANCED TECHNOLOGIES & MANUFACTURING

• Texas manufacturing employs nearly 874,450 people at an average annual salary of $71,500
• Texas is the top U.S. state for manufacturing exports and total shipment value
• 4 ICIA campuses in 2017-2018

ACADEMY SPOTLIGHT

Manor High School Career and Technical Education Center
Manor, Texas

Along with partners Samsung and Applied Materials, Manor Early College High School has worked with Austin Community College to develop a collaborative student career pathway. ICIA enabled these partners to start fresh with a co-developed course pathway that maximizes readiness. For example, students now attain Occupational Safety and Health Administration (OSHA) certification in their freshman year to alleviate many of the traditional barriers to on-site job shadowing experiences. The collaborative team in Manor has exemplified a “no barriers” mindset for student success.

BIOTECHNOLOGY & LIFE SCIENCES

• Texas is home to more than 3,900 life science and research firms, and approximately 97,600 workers in related fields
• 9 ICIA campuses in 2017-2018

ACADEMY SPOTLIGHT

Lyndon B. Johnson High School
Laredo, Texas

Through its partnership with Laredo Community College, Lyndon B. Johnson High School in United ISD brought together rigorous academics with applied learning to prepare students to enter the healthcare workforce. Aspiring nursing students began hands-on learning experiences with the Texas A&M International mobile nursing unit as underclassmen. Starting with basic height, weight and blood pressure intake measurements, student experiences have been designed to become increasingly advanced and aligned with the demands of the job. This approach, driven by the ICIA initiative, has accelerated learning opportunities while adhering to industry requirements for credentialing, age and experience level. Beyond just developing technical skills, these work-based experiences have exposed students to the behavioral expectations and professional norms needed for success in biotechnology and life sciences jobs.

AEROSPACE & DEFENSE

• 17 of the 20 largest aerospace manufacturers in the world, including Airbus, Boeing, Bell Helicopter, Textron, Gulfstream and Lockheed Martin, have major operations in Texas
• Texas’ aerospace and aviation labor force is one of the largest in the nation, directly employing more than 135,000 workers
• In addition to NASA’s Johnson Space Center, Texas is a growing hub for the emerging commercial space development industry
• No ICIA campuses yet

ENERGY

• The energy sector contributes more than $172 billion to the Texas economy
• Texas is the No. 1 state for total energy production
• The Texas utilities industry is projected to grow at a rate of 17.8 percent from 2014-2024
• Texas is home to over 50 energy-related companies on the Fortune 1000 list
• No ICIA campuses yet

ICIA IMPLEMENTATION TIMELINE

MARCH 2016
Tri-Agency Workforce initiative established

SEPTEMBER 2016
ICIA grant released for schools

DECEMBER 2016
ICIA awardees selected

FEBRUARY 2017
ICIA implementation began
• Employment in computer systems design has risen 60 percent in Texas over the last 10 years
• Texas is home to more than 17,600 technology firms, employing 203,700 workers with an average wage of $96,600
• 4 ICIA campuses in 2017-2018

ACADEMY SPOTLIGHT
Career Launch: Information Technologies at Reagan Early College High School
Austin, Texas
Through their partnership with Career Launch: Information Technologies at Reagan Early College High School, Dell provided immense support in the design of new facilities for students that mirror the environment of innovation that characterizes the technology industry. Focused on cyber security, the school engages students with real challenges faced by the Dell cyber security team to prepare students to meet true industry needs.

PETROLEUM REFINING & CHEMICAL PRODUCTS

• The average yearly wage in Texas’ refining and chemical manufacturing industry is $95,000
• More than 100,000 petrochemical workers employed in Texas
• 2 ICIA campuses in 2017-2018

ACADEMY SPOTLIGHT
Austin Innovation Center Petroleum Refining Academy at Beaumont Early College High School
Beaumont, Texas
Promising ICIA progress at the Austin Innovation Center Petroleum Refining Academy in Beaumont ISD was nearly derailed in the wake of Hurricane Harvey. Thanks to the dedication of industry collaborators (ExxonMobil, BASF, Huntsman, Air Products) and the creative flexibility of the higher education partner, the academy was temporarily moved onto the campus of Lamar Institute of Technology (LIT) to ensure minimal disruption for students. Today, the academy is thriving as a hub for students pursuing careers in petroleum and refining.

WORKFORCE READINESS
ICIA campuses partner with industry partners to:

Provide students with meaningful work-based learning opportunities
Define non-academic skills needed for workplace success
Map the certifications and credentials needed for careers of today and tomorrow
Engage communities

“...By establishing this initiative, the State of Texas seeks to ensure that the needs of both its growing workforce as well as new and existing businesses are met and each are prepared to successfully operate in an ever-changing 21st century economy.”
-Governor Greg Abbott

All industry cluster statistics sourced from the Texas Economic Development Division within the Office of the Governor: businessintexas.com
In 2017, Educate Texas was appointed by the Texas Education Agency as the technical assistance provider for the Industry Cluster Innovative Academy program. This assistance includes providing leadership coaching to each campus, creating an integrated network of schools, and establishing tools to ensure communication across schools to share learning experiences. Educate Texas, a catalyst for large-scale educational systems change, has partnered with public and private entities for more than a decade to achieve the goal of improving the public and higher education system in Texas so that every student is prepared for and achieves success in school, in the workforce and in life. edtx.org