

Building Blueprints

{ FACILITIES IN FOCUS }



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Cutting-edge Learning Space. The Sarasota County Technical Institute has a high-tech lab and an operating room used for simulation and training of students in the health sciences program, including the professions of emergency medical technicians and nursing.

CTE in the 21st Century

CREATING LEARNING ENVIRONMENTS THAT HELP STUDENTS GAIN HANDS-ON EXPERIENCE.

by DANIEL M. TARCZYNSKI, AIA

BUSINESS TECHNOLOGY, culinary arts, construction and architectural drafting technology, automotive service and marine technology, early childhood education, health sciences, cosmetology — these are just a few of the many programs offered to today's students in Career and Technical Education (CTE). These unique programs have created endless answers to the common question of, "What do you want to be when you grow up?"

Today's career and technical centers are equipped with site-based businesses, high-tech laboratories, collaboration spaces and the state-of-the-art equipment needed to assist students in reaching their professional goals, whether it be an automotive mechanic, draftsman, hairstylist, emergency

medical technician or a graphic designer.

In order to give students the hands-on learning environment needed to succeed in their chosen career, the design needs to be based on the principles of 21st century learning. Today, our K-12 schools have CTE programs and spaces incorporated into the building's design, as well as new school campuses dedicated specifically for career and technical education. As architects, we must create spaces that enrich our CTE programs by creating a high-tech, real-world environment where students of all ages can gain the skills they need to succeed.

According to the U.S. Department of Education, effective, high-quality CTE programs provide students with a curriculum based on integrated academic, technical content and strong employability skills.

They must also provide work-based learning opportunities that enable students to connect what they are learning to real-life career scenarios and choices.

The Immokalee Technical Center, more commonly known as iTech, is an example of an effective CTE program, where the programs are enriched by the facility in which they are taught. Immokalee, Fla., a historically agricultural town, required a place where the needs of the neighborhood could be served and students could be trained to become leaders of the workforce community. To encourage increased educational and business opportunities, beyond agriculture, the District School Board of Collier County made a decision to build a 21st-century technical school in the heart of the community. The goal was to inspire students to complete their education and to provide recruiting

CAREER & TECHNICAL EDUCATION

We're Cooking Now. Sarasota County Technical Institute - Bistro 502, the technical institute is a community-focused facility with a Bistro Café that serves meals to the staff and public and is operated by the students in the Culinary Arts Program. Bistro 502 Café offers a sit-down dining experience for students, faculty and visitors, as well as the general public.

opportunities for area businesses.

One of the unique features of iTech is the site-based businesses that are open to the public and designed as a storefront concept. These storefronts are located along the perimeter of the facility, and include a bakery, cyber café, a bank, practicing medical clinic, auto service center, child-care center and a salon. The businesses are operated by the students and give them direct on-the-job training and customer service skills that cannot be taught in a standard classroom setting.

By integrating the CTE programs into the building's design, the students are given a unique learning experience that gives them the marketability and skills they need to join the workforce upon graduation.

Another highly effective CTE program, located just 100 miles northwest of iTech, is the Sarasota County Technical Institute (SCTI), one of the most comprehensive career and technical schools in the Southeast. Since 1967, the Sarasota County Technical Institute has been providing career education and technical training to the students and community in Sarasota, Fla. The institute started as a 75-acre campus that offered 13 programs. When the final phase completes in 2013, the new institute will offer 39 training programs in six new buildings. This new institute replaces an old and antiquated facility with a state-of-the-art, high-tech and energy efficient design.

The modern design of the campus creates a sophisticated civic image that has the feel of a 21st-century corporate research center and was designed with flexibility in mind. The academic spaces are centered on the concept of flexibility, to accommodate future changes in the programs in order to always give students the most up-to-date,



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ABOVE LEFT: COURTESY OF SCHENKELSHULTZ. ABOVE RIGHT: PHOTO © RAYMOND MARTINOT/COURTESY OF SCHENKELSHULTZ

Curling and Fries. LEFT: Immokalee Technical Center - Salon, part of the Cosmetology program that is open to the public to provide services to the community and used as a training tool for students. RIGHT: Immokalee Technical Center - iTown Cafe, one of the center's site based business that is open to the public and situated along the front perimeter of the building.

real-world job training and instruction. All the lab spaces were designed using a planning module that allows for future changes in the rooms with minimal impact to the overall building systems and exterior.

The state-of-the-art labs, which includes surgical technology, practical nursing, emergency medical technology, human patient simulation, phlebotomy, cosmetology, digital design, television broadcasting and culinary arts contain specialized equipment and instruction tools that can be adapted to the latest technology and advancements in the industry.

The building's flexibility also carries outside of the classroom walls by incorporating wireless technology throughout allowing students to utilize the informal

learning areas for group study and collaboration.

These effective 21st-century schools are an important part of today's CTE programs and important in pushing us as designers to create forward-thinking spaces. By designing schools that are focused on the students of today, but flexible enough to accommodate the needs of tomorrow, students now have a place where they can learn the skills they need to achieve their ultimate dream job. [NPI](#)

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