

Changing Careers: The Reinvention Of Vo-techs

For years, vocational-technical schools have struggled with declining attendance, largely due to the perception of vo-techs as a track for students with poor academic capabilities or behavioral problems.

Studies undertaken by the last National Assessment of Vocational Education (NAVE) confirmed that vocational instruction in the early 1990s was still largely traditional, with little focus on academic skills. Over the last five years, however, career education has been given new prominence by increased federal emphasis on program performance and on high academic achievement.

What's in a name?

In an effort to distance themselves from the negative associations of "vo-techs," many vocational schools are now repositioning themselves under the terms Career and Technology Centers or Technical High Schools.

Smaller is better

Mirroring trends in academic secondary educational institutions, Career and Technology Education is moving towards

smaller learning communities. Studies show that in smaller learning environments attendance, graduation rates, and postsecondary enrollment increase while dropout rates and disciplinary problems diminish substantially.

Career clusters

Both academic and career high schools are shifting towards the concept of clustering learning in a given subject area,

similar to the idea of a college major. In Maryland, the State Department of Education worked with local business leaders to organize the state's Career Cluster system, which is organized around ten broad career areas that reflect Maryland's key economic sectors. These Career Clusters work in conjunction with smaller learning communities to offer students more opportunity to explore career choices while still in high school.



Worcester Technical High School
Newark, Maryland

Three School Campus Undergoes Major Renovation



Serving the greater Wilmington, Delaware area, the former Wilmington High School campus now houses 3 different and independent schools. Built in the early 1960's, the 300,000 SF campus is home to Cab Calloway School of the Arts serving grades 6 through 12, Charter School of Wilmington, and the James H. Groves Adult Education Program.

High School students at Cab Calloway, a magnet school for the performing arts,

attend classes side by side with those in the Charter School of Wilmington's advanced science program. Along with the middle school and adult students, they all share a desire to learn while waiting patiently for promised building upgrades.

It has been 35 years since the school had a major renovation. Well designed and well built, nevertheless

the building needs major upgrades to comply with current codes and educational standards.

Several science classrooms will be completely refurbished. Planned renovations include improved handicap accessibility, energy, and life safety upgrades. Installation of fire sprinklers, creation of smoke control compartments and additional fire alarm devices will significantly improve building safety.

The highlight of the project is the renovation of the performing arts auditorium. Currently suffering from poor sightlines, acoustics and lighting, the planned construction will require demolition of the current space and replacement of most theatrical components.

In an effort to maximize the use of the School District's funds, a few of the existing theater systems have been identified as suitable for retrofitting and upgrading. However, to achieve proper sightlines for the audience, the existing floor will be completely replaced. The orchestra pit will be rebuilt to include a motorized floor lift, which can also serve as an expanded stage or as additional seating during educational programs.

The BSA+A team is coordinating the District's requirements with the need for the school to remain open and in-use throughout the renovation. Construction is scheduled to begin in late 2007.



Keeping Up With Growth

The population in Middletown, Delaware is growing rapidly with new residential developments going-up all of the time. BSA+A has assisted the town with its growth by designing new buildings that accommodate their increasing needs. BSA+A is currently designing the new Appoquinimink High School and completing renovations at the MOT Senior Center. Our team recently successfully completed the Middletown Town Hall.




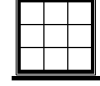




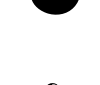

The 18,000 SF Middletown Town Hall features a brick facade and metal roof that blend with the existing main street aesthetic. The main street location suggests a primary entrance at the rear, where the building envelope utilizes a more contemporary look. Building security features include a card access reader system, bulletproof glass and walls, and enclosed receptionist and cashier areas.

Public spaces are accentuated with daylighting throughout, using small atriums to highlight reception and lobby space. The finished interior houses the council chamber, planning/review department, executive offices, accounting/billing department as well as the Mayor's office. The council chamber will be used for public meetings and the large brick paved plaza outside the chamber will be used for community activities and events. The building is designed to form a completely expansive facility that will continue to accommodate the growth of Middletown.



10 Steps To Better Energy Efficiency

Did you know that 34% of a school's M&O budget is spent on energy and utilities and that the national median amount spent on electricity by schools is \$0.64 dollars per square foot? Energy bills are on the rise so here are ten steps to promote environmentally friendly energy efficiency in your facility:

- 1  **Solar Energy**
Installing photovoltaic cells on rooftops collects power from the sun to supplement other energy sources. It can also be used as a teaching tool when installed in schools.
- 2  **Lighting**
The use of indirect light fixtures promotes better light using less energy. A combination of natural and artificial lighting also saves energy. Louvered skylights and windows with light sensors to automatically control the level of artificial lighting for optimal illumination is an effective system to save energy.
- 3  **Low E-Glass**
Tinted and reflective windows at south, east and west faces of the building help reduce heat gain from the sun. Clear low-e glass on the north side maximizes daylight.
- 4  **Operable Windows**
Providing operable windows for natural ventilation with thermostats installed in each room allows for better energy management.
- 5  **Heat Recovery**
High ventilation requirements in buildings causes heat loss via exhaust. Implementing a system for heat to be extracted out of the exhaust air has a recycling cost that will pay for itself relatively quickly.
- 6  **Floor Plans**
When building new, a saw-toothed or linear plan saves energy by maximizing the building envelope allowing for cross-ventilation and thermal efficiency.
- 7  **Integrated Mechanical System**
If your buildings are consolidated, a ground-level centralized plant piped to air-handling units rather than rooftop units promotes energy efficiency. Condensing boilers and water-efficient plumbing fixtures also save energy costs.
- 8  **Energy Management**
Examining and monitoring all levels of energy consumption will help you develop strategies to save money on utilities bills. A plan in place to reduce heat during non-business or instruction hours and eliminating non-essential appliances and lighting will increase energy savings.
- 9  **Gray Water Collection System**
Installing gray water collection systems gathers the untreated "used" water to irrigate the landscape surrounding the building or to flush toilets.
- 10  **Conduct A Feasibility Study**
Where should you begin? A feasibility study provides a practical overview of a building's systems, energy performance, needs and opportunities for savings. It will help you identify more cost-effective ways of accomplishing energy savings throughout the building.