PROJECT: South County Education Center

OWNER: St. Louis Community College

CHALLENGE: Maximizing energy efficiency is always an important design aspect for St. Louis Community College as well as for McClure Engineering.

CONSTRUCTION COST: $10 million

BUILDING SIZE: 59,500 sq ft

SCOPE: The new facility includes a 2,100 square foot multi-purpose room, a 3,000 square foot academic support center, 3 computer labs, 2 interactive classrooms, 17 classrooms equipped with advanced computer and audio/video technology equipment, a cyber cafe and an outdoor patio.

APPROACH: The HVAC systems use a dedicated outdoor air unit that provides ventilation air to the building. An energy recovery wheel in the outdoor air unit reduces the required equipment capacity, and reduces the operating costs of providing ventilation air. Commons spaces utilize carbon dioxide sensors to reduce ventilation air requirements when the spaces are not used and increase ventilation when spaces are occupied, thus reducing energy usage. The systems are controlled by a complete energy management system for off-site control and performance tracking. The classrooms have indirect light fixtures, which provide more diffused light to the space and a more comfortable lighting design. McClure Engineering also provided complete commissioning services for the project on all the building systems to ensure a fully functional facility.

COMPLETION: 2003

AWARD: 2003 Architectural Portfolio Award from American School & University (AS&U) Magazine