21st century learning is an emergent education model designed to provide students with the knowledge and skills to succeed in a globally and digitally interconnected world. The movement is led by the Partnership for 21st Century Learning (P21), a national nonprofit organization uniting the business community, tech companies, education leaders, and policymakers to engage in the national conversation on the importance of making 21st century readiness the center of K-12 education.

“To successfully face rigorous higher education coursework, career challenges and a globally competitive workforce, U.S. schools must align classroom environments with real world environments by fusing the 3Rs and 4Cs,” according to P21. This 21st century learning model combines the teaching of core academic subjects – reading, writing and arithmetic; colloquially known as the 3Rs – with the 4C learning and innovation skills of creativity, critical thinking, communication and collaboration.

Architecture can advance 21st century learning by designing or adapting school environments to support student-centered learning.

The U.S. Department of Defense is on the leading edge of building 21st century schools. Last year, it launched a comprehensive program to completely renovate or replace the majority of its schools worldwide to create learning environments that “provide access to innovative, engaging, and collaborative learning.”
The P.K. Yonge Developmental Research School at the University of Florida in Gainesville is another pioneer, collaborating with researchers to develop innovative solutions for 21st century learning. Beginning in 2011, the K-12 school in UF’s College of Education embarked on a total campus transformation into a learning community model and 21st century technological powerhouse.

The College describes its new laboratory school. “Closed-off classrooms will be replaced by learning studios with transparent walls, common areas and media centers. Computer labs will be replaced by wireless laptops. Students also will have outdoor learning areas surrounded by nature, indoor reading lofts and comfortable chairs facing each other instead of all staring ahead at the teacher, as well as traditionally organized learning experiences. Teachers will have designated workrooms and planning areas, accessible throughout the day to encourage collaborative teaching efforts.”

Recently, CTH+A was selected to provide architectural and engineering design services for the renovation of Pine Crest Elementary School in Sanford, recently named The School of Innovation for its use of the latest in instructional technology and interactive learning. It represents the first time Seminole County Public Schools has set the goal of creating a of 21st Century learning environment.