

Project Description Maumee Valley Country Day UPPER SCHOOL, Toledo, Ohio

The Project The independent day school, established 1884, found their existing 1957 Upper School building for 200 students in grades 9 – 12, to have been inadequate for some time. The Headmaster and Board's vision included invigorating change that would “sustain the campus community with responsible inspiring education.....with a vibrant place; juiced by learning.”

The Site The picturesque 70-acre campus is a civic anchor in a semi-urban, commercial and residential neighborhood while also bordering the wooded Swan Creek watershed. Along the ridge of the campus overlooking the wooded ravines, white buildings are densely and organically situated, uniting a span of architectural styles in a loose frontal arrangement along a single sweeping road.

The Design Intent The design goals were to create integrated spaces of an energized learning environment which inspires, engages, motivates, and contributes to the intellectual and social life on campus. The new 44,000 SF Upper School replaces the 1950's glass structure and was LEED designed to connect all parts of the campus as a bridge between existing buildings – reinforced by fluid circulation, permeable enclosure, and providing no boundaries in a connective global world of educational discovery. Porous space allows light and movement to interact, encouraging collaboration and synergy. The new 2 story Upper School provides natural exposure and views front to back, reduces the built campus footprint, and relates in massing and style as a white and glass structure.

Distinguishing Factors

1 Creating a fluid bridge at the core of the Campus which engages the new main school entrance and new Upper School into a facility representing a window on the world - linking and transforming the whole campus with progressive spaces and varied learning environments inside and outside. The use of a full length, story-high truss at the Second floor emphasizes the concept of the new structure bridging and linking the campus. The visual strength of the truss and the spatial effects which are created provide dynamic relationships between program pieces and learning core elements.

2 Creating interactive flexible learning spaces and environments that take advantage of the small student/teacher ratio and provide diverse spatial opportunities and connectivity for learning - academically, individually, and socially – and to steward an atmosphere of citizenship in a learning community. Throughout the campus, in focus classrooms or flexible spaces - memorable academic environments foster a love of learning.

3 Creating a vibrant, integrated, and environmentally sustainable learning facility on a 70-acre site that provides an inspiring framework - for talent, culture, curiosity, contemplation, discovery, and discussion to flourish in an atmosphere that in itself reflects uniqueness and education. Reclaimed green space forms a new campus Global Lawn, activating the back side of the campus.

4 The use of loop circulation in the linear structure has parallel and cross axes on 2 floors with 3 stairways which provide for efficient organization of building systems, infrastructure, and intuitive fluid movement. Vertical spatial communication of open spaces allows for extensive views, vertical interaction, focal draw to volumetric elements, and varied choices for circulation.

5 The use of a full height curtain wall system as the primary building enclosure consists of 3 types of panels with different transparency levels offering dynamic lighting and views from inside and out, and through the building. Natural day-lighting provides energy savings and healthy penetrations of layers of light, and relieving views.

6 The learning environment is designed to achieve varied settings and stimulating spaces which, by their nature in design, create motivating and dynamic relationships. Spatial movement, natural day-light, color theory, environmental awareness and stewardship, and connective opportunities between destinations provoke interaction. The fostering of collaboration by utilizing small learning groups and open walls is integrated in every space. The learning spirit is visible and expressive - stimulated by spaces that invite and spark creative thinking.

7 Technology is integrated thoroughly by providing electronic connectivity to every user. The conceptual spine of the structure contains the utility and technology framework path which follows the loop circulation of each floor. The physical and wireless connections are available throughout. Integration of technology as a tool and resource is strongly supported for building operation, communication, and education. The Media Production Lab and Media Center provide central program spaces which anchor the core of the building and, at each floor, express a view into the world of technology in action.

8 Materials and building systems are expressed honestly in raw aesthetic form and composed proportion which support a LEED initiative utilizing local and recycled sustainable products. A glass curtain wall envelope, natural day-lighting and ventilation, sun control, high performance mechanical components, concrete floors, reduced finishes, a white roof, automatic controls, and structural, mechanical, and technology components are expressed to inform and reinforce the basis of the design. The building is ready to receive alternative energy supplies when available.

9 The concept of spanning between existing buildings required the new 2nd floor to project by 1/3rd the length over part of the remaining building resulting in the structural truss defining the backbone of the new building. The dramatic projection also allows for new infrastructure to be independent of the existing structural foundations. Resulting spaces and the structural expression of the truss are purely deterministic and, as a strong feature, evoke the physics of the element as an educational exercise. Movement through learning is also suggested with the diagonal rhythm of the progressive members.