



INNOVATIVE LEARNING ENVIRONMENTS:

Design with the Student in Mind¹

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CREATING AN OPTIMUM FIT BETWEEN PEDAGOGY AND SPACE

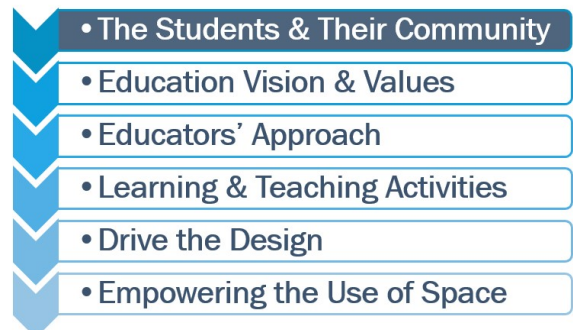
Research and best practice reveal when physical and educational design are aligned, space can serve as an essential tool in creating a successful learning environment and improving student outcomes. Furthermore, creating the optimum fit between instructional strategies and space better leverages the dollars allocated for both new school buildings and redesign of existing spaces.²

This link between educational approach and space becomes even more critical as educational organizations look to fundamentally change the learning and teaching activities within the classroom to address 21st century learning outcomes for a changing world. The process of educational space design offers a unique opportunity to inspire this shift from traditional to innovative learning strategies.

MEANS GOING DEEPER THAN “INSTRUCTION DRIVES CONSTRUCTION”

Complex learning and teaching calls out for an aligned space that transforms the old school linear rows of front facing desks into an inspired and innovative environment for today’s students.

Aligned learning spaces are built at the intersection of physical space and core values of the educational organization. As the design team engages the learning community to understand the school or district’s guiding principles and educational approach, mapping the learning and teaching activities follow. The diversity and nuance of these activities drive the space design and, ultimately, empowers the use of the space by students and teachers. But, “instruction driving construction” is only part of the conversation.



The challenge in creating aligned spaces is to ensure the process also includes a larger contextual understanding of the learning ecosystem. To ensure full alignment, **space design is grounded in the cultural story of people** — the lived experience of students, teachers, staff, parents and community over time — that bring the learning space to life. Well-aligned learning spaces structurally support not only the innovative pedagogy, but also a sense of belonging; places in which a student can bring their full self, develop their own visions, and grown their identity as a successful learner in an academic environment. These are spaces designed with the student in mind.

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² Research on pedagogy-environment fit was conducted by the author as a partnered effort between the University of San Diego’s Learning Space Design Project and San Diego State University’s National Center for the 21st Century Schoolhouse. This briefing highlights findings from this partnership as well as subsequent work conducted by Wayfind Education and LPA Research + Education Design (LPARED).

TO UNLEASH STUDENT {AND TEACHER} AGENCY

The type of uniquely human competencies students need to be successful in today's innovation economy—critical thinking and problem solving, creativity and flexible thinking, cultural awareness, teamwork, and ethical behavior—are best developed in environments that build on the students' own innate desire to learn. Five design features support not only these future-focused goals, but also each student's agency as they journey to find their place of impact in the world.

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Features that attend to flexibility, collaboration, visibility, connectedness, and wholeness, promote agency within the space – the ability to make choices and take actions needed to attain goals. Student-centered and student accessible spaces facilitate independent navigation within the building, fostering feelings of safety and confidence. Students desire a sense of control within their learning environment. When students can “read” a school building, they feel self-regulated and self-assured and can learn to make successful choices. A sense of place improves a sense of self and learning. Moreover, teachers value their influence and control over the physical setting, and teacher-supportive spaces allow for the adjustments necessary to accommodate personalized learning strategies.

1. FLEXIBILITY

Flexible and adaptable spaces keep up with changing technology and support the wide variety of learning activities needed to foster future ready learners. Moveable furniture allows for ease of reconfiguration. This flexibility of design, and ongoing management of space, generates a sense of ownership and pride of place. A variety of zones within the learning environment provides choice for students and attends to the needs of a diverse set of learners.

2. COLLABORATION

Communally-oriented spaces help to cultivate a collective spirit of student and teacher collaboration and team building. Collaborative spaces, arrangements, and comfortable furnishings provide opportunities for exploration, experimentation, demonstration, and peer review. Spaces are sized for collective teamwork, but also include smaller breakout spaces for more focused pre-work.

3. VISIBILITY

Physical transparency in the space makes learning visible. Spaces that are visually connected to one another foster the sharing of practice among teachers and students. Student display areas highlight the process, progress, and evidence of learning. Color and signage emphasize positive messages about learning and belonging with an academic environment.

4. CONNECTEDNESS

Spaces that are physically adjacent to one another foster interdisciplinary learning and teaching. Additionally, digital technologies provide virtual adjacencies to connect with other communities of learning and teaching. Resources are readily available for student access. Spaces reflect a connection to the students' community, culture, and the world of work to bring real world context into the learning environment.

5. WHOLENESS

Spaces that attend to the basic needs of physiological, emotional, and social well-being allow students and teachers to focus on the learning and thrive. Adequate interior lighting, heating, acoustics, air quality provide healthy accommodations. Daylighting, exterior views and access to nature, and aesthetic and kinesthetic comfort (uncluttered space, use of color, ergonomics, space to move about) support a wide range of neurodiversity. Additionally, restorative spaces and nooks encourage relaxation, reflection and rest from the direct attention fatigue of cognitive work.