



REIMAGINING THE STANDARD

DESIGNING LEARNER-CENTERED
ENVIRONMENTS



THEN &

Standard classroom design guidelines have changed surprisingly little in the past 50 years, yet instruction has seen quite a paradigm shift over the past decade. This change has been catalyzed by better access to technology and our growing understanding of how students learn.

Just as no two students are the same, no two students learn the same way. This fundamental understanding, backed by decades of brain research, has laid the foundation for a substantial increase in the development of student-focused, active and inquiry-based pedagogies that strive to match students with the instructional methods to which they respond best.



NOW



The goal is to create an environment that caters to **multiple learning styles** and is conducive to Project-Based Learning while still adhering to the regulations many public schools face. While a large, collaborative space is ideal from an educational perspective, the reality is designers are often tasked with creating equitable, low-cost classrooms in an 800-square foot box.

THE CASE FOR DIFFERENTIATED INSTRUCTION

Based on educational research conducted since the 1970s by Dr. Rita Dunn and Dr. Kenneth Dunn and Susan Rundle, the BE Learning Styles model and survey were created. The model is comprehensive and unique in that it identifies and separates biological components (Brain-Behavior Relationships) and environmental components. This is in response to the understanding that 65 percent of learning style is biological and 35 percent behavioral, based on research conducted by Dr. Richard Restak and Dr. Armin Thies in the late 1970's. The Learning Styles/Strengths chart identifies six major elements with 28 variables that stimulate learning and affect how students do the following:

- Access Information
- Process Information
- Problem Solve
- Concentrate
- Collaborate with Others
- Retain/Recall Facts

Of the six elements, four of these can be most impacted by the design of space. These elements are physiological, environmental, perceptual and sociological.

The “sage on the stage” model of teaching is now widely regarded as *ineffective* for 85 percent of students.

WHY

equal access to learning
better motivation
improved comprehension
embracing diversity

HOW

content
process
product
learning environment



Brain research performed since the 1970's by the late Dr. Marian Diamond, a professor of Neuroanatomy at UC Berkeley led to the groundbreaking evidence of neuroplasticity, or the brain's ability to change over time.

As a result, it is understood that developing brains are more plastic and subject to marked improvement with enrichment. **Children's brains are deeply affected by how they are exposed to learning and the environment in which it occurs.**

Up to 20% of your school's total area is used for circulation.

What if this quiet space that is typically only used between classes could be used all throughout the day?

THINK

THINKING BEYOND THE BOX

Most public school systems rely on a defined **Model Program** that dictates the basic requirements for a standard elementary school classroom. How can schools be designed to overcome the traditional limitations of the 800-square-

foot box within the context of those requirements? Sometimes it's as simple as redefining the classroom to incorporate its adjoining corridor in order to create a space that better accommodates differentiated learning.

“DEAD SPACES” LIKE CORRIDORS CAN BE DESIGNED TO PROVIDE ADDITIONAL BREAKOUT AREAS FOR INDIVIDUAL INSTRUCTION, SMALL GROUP WORK AND EVEN COLLABORATION BETWEEN MULTIPLE CLASSES.



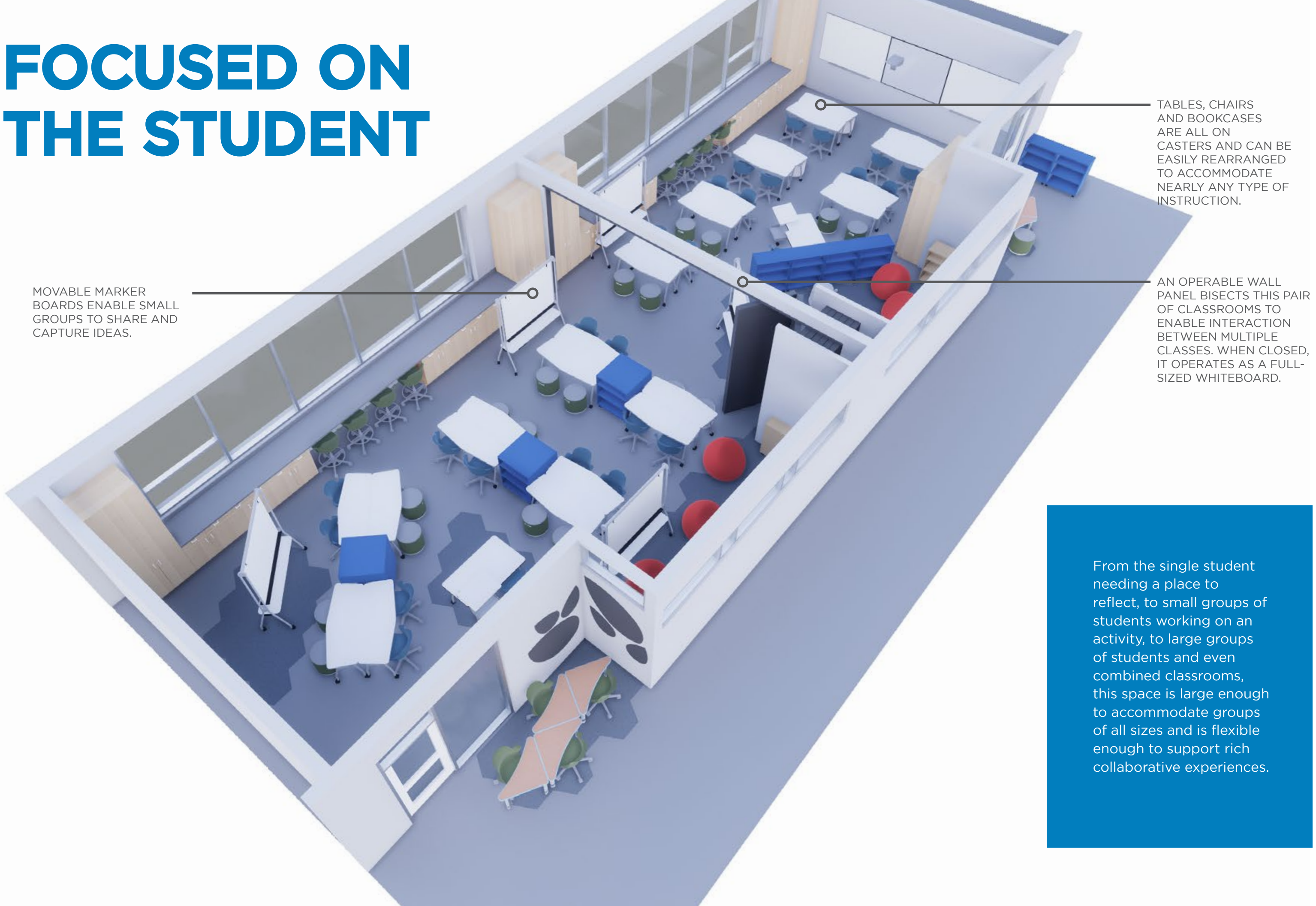
FOCUSED ON THE STUDENT

MOVABLE MARKER BOARDS ENABLE SMALL GROUPS TO SHARE AND CAPTURE IDEAS.

TABLES, CHAIRS AND BOOKCASES ARE ALL ON CASTERS AND CAN BE EASILY REARRANGED TO ACCOMMODATE NEARLY ANY TYPE OF INSTRUCTION.

AN OPERABLE WALL PANEL BISECTS THIS PAIR OF CLASSROOMS TO ENABLE INTERACTION BETWEEN MULTIPLE CLASSES. WHEN CLOSED, IT OPERATES AS A FULL-SIZED WHITEBOARD.

From the single student needing a place to reflect, to small groups of students working on an activity, to large groups of students and even combined classrooms, this space is large enough to accommodate groups of all sizes and is flexible enough to support rich collaborative experiences.



REDEFINING THE CLASSROOM

WRITABLE WALL SURFACES SUPPORT VISUAL LEARNERS AND ENABLE GROUPS OF ALL SIZES TO SHARE INFORMATION AND RESEARCH.

CLASSROOM ACOUSTICS ARE CRITICAL IN COLLABORATIVE SPACES. SOUND ABSORBENT MATERIALS MINIMIZE TEACHER FATIGUE AND BOOST STUDENT COMPREHENSION.

LED LIGHTING, WHEN USED IN COMBINATION WITH DAYLIGHT SENSORS, AUTOMATICALLY DIM WHEN THE AVAILABLE SUNLIGHT IS SUFFICIENT SAVING ENERGY AND OPTIMIZING THE IMPACT OF NATURAL LIGHT ON STUDENT PERFORMANCE.

BREAKOUT SPACE IMMEDIATELY OUTSIDE THE CLASSROOM IS IDEAL FOR ONE-ON-ONE INSTRUCTION.

MOVABLE SEATING AT VARIED HEIGHTS ACCOMMODATES THOSE WHO RESPOND BEST TO BOTH FORMAL AND INFORMAL INSTRUCTION.



SUPPORT FOR INDEPENDENT LEARNERS



While many students benefit from active, energetic, collaborative classroom environments, some learn best when given adequate time for independent study and quiet reflection. The classroom can best accommodate this type of learner when it includes a separate, informal space with comfortable furnishings and good acoustical control.

DESIGNING THE CLASSROOM OF THE FUTURE

The more that you read,
the more things you will know.
The more that you learn,
the more places you'll go.
Dr. Seuss

Flexible classrooms can easily transform to meet evolving pedagogies, the rapid evolution of technology and changing student demands. By designing thoughtfully today, your school will be better equipped to meet the future.

THINK

Today's students are technologically savvy, curious and social. Many find student-driven projects most engaging and gravitate toward experiential instruction like Project-based learning.

Our children are growing up in a world that requires leadership, collaboration and communication skills. Our schools should be designed to support the development of those critical skills.



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