



MARCO™

Shaping Spaces, Shaping Minds

The Psychology of Shape in
Learning Spaces.

SHAPING SPACES, SHAPING MINDS.



Understand the psychology of shape in learning environments



Apply shape-driven design for solo and group learning



Design for inclusivity and well-being using UDL principles



Translate design theory into real-world applications





1

Understand the psychology
of shape in learning
environments



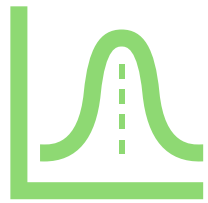
The Psychology of Shape in Learning Environments

Shape isn't just a visual element—it's an emotional and cognitive cue.

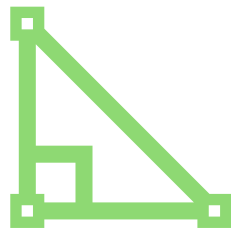




How Our Brain Process Shape⁵



**Curves =
Comfort + Approachability**



**Angles =
Focus + Alertness**



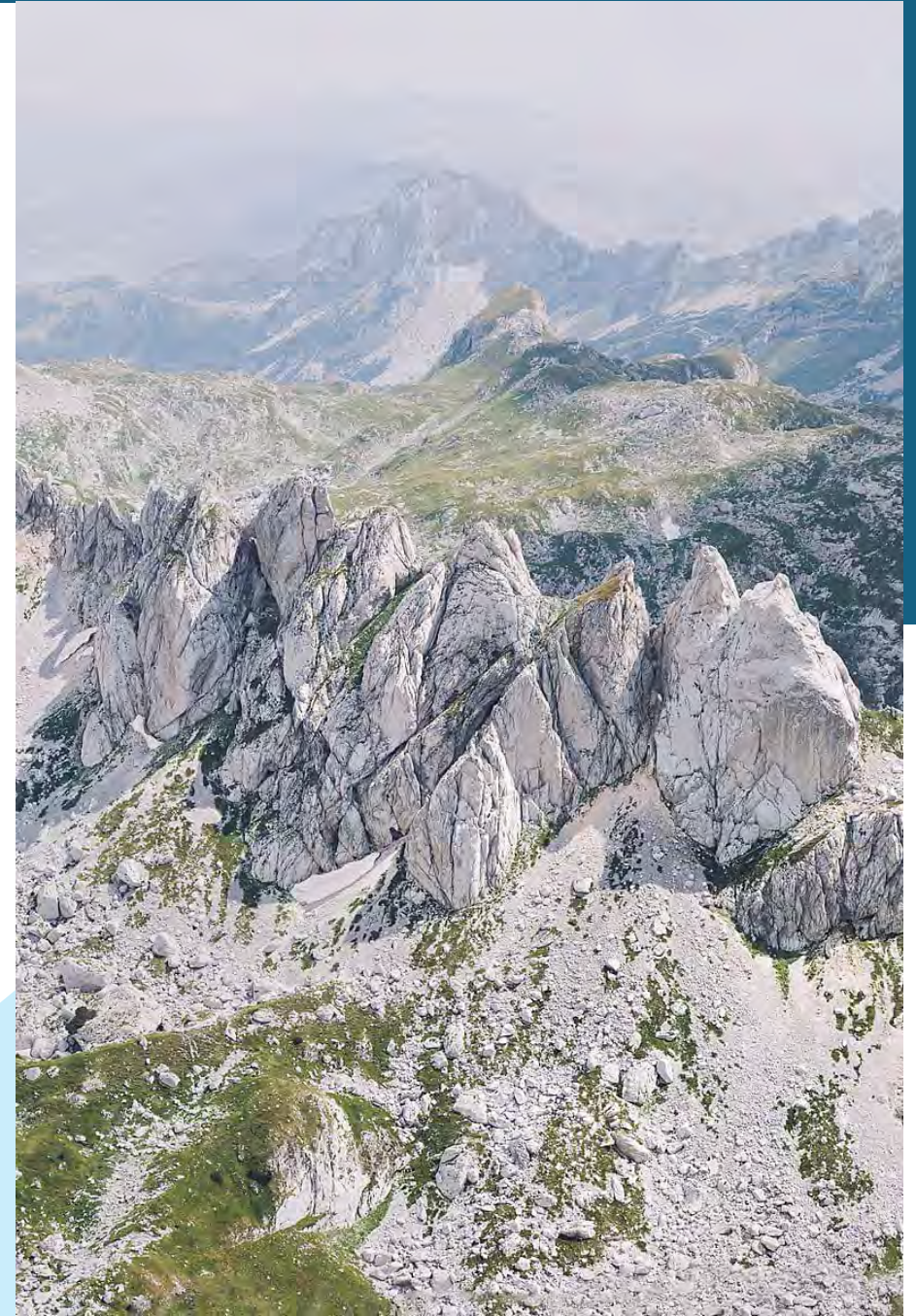


Curved Architecture vs. Angular

A Cognitive + Emotional Contrast

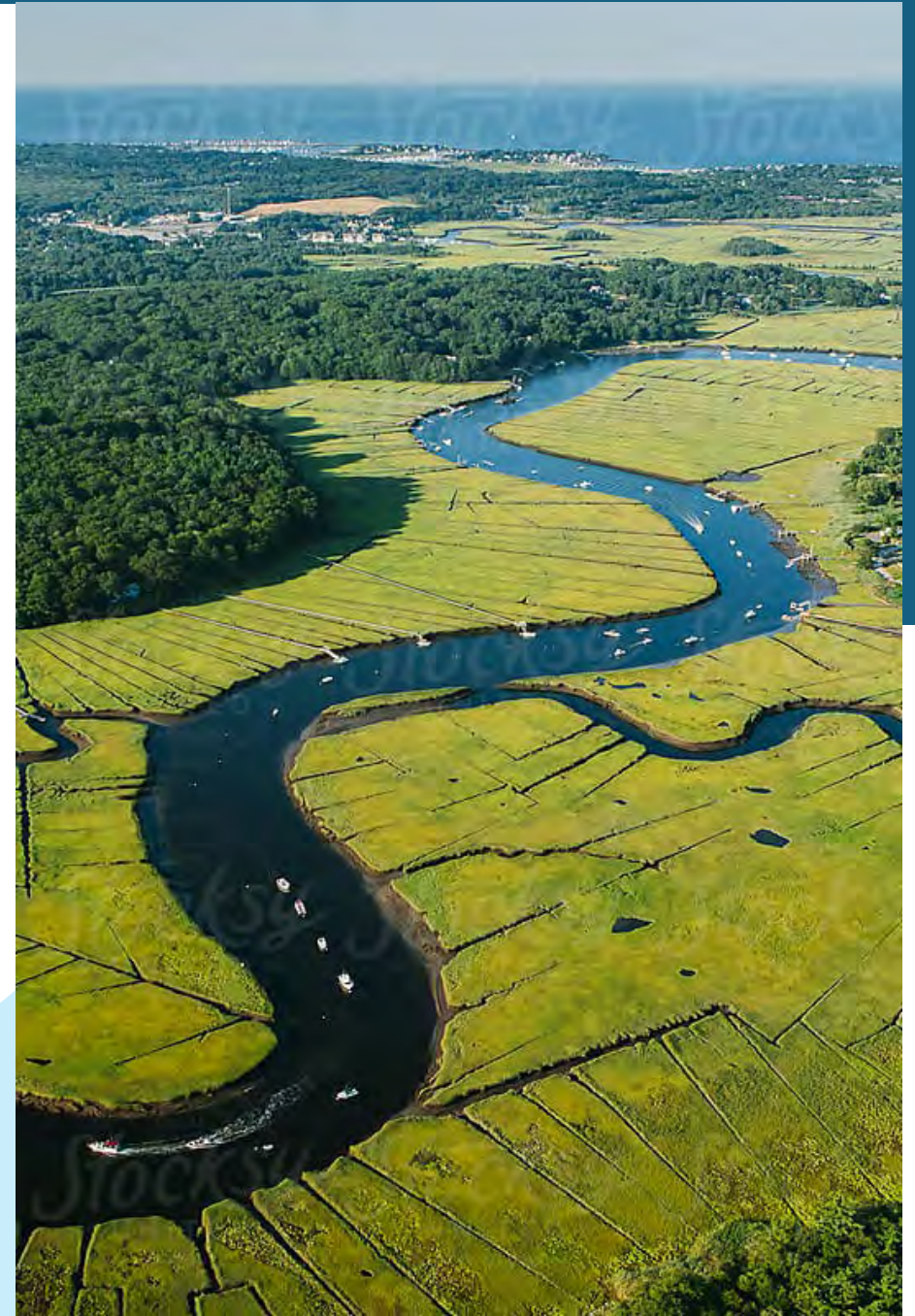
FEATURE	CURVED DESIGN	ANGULAR DESIGN
Visual Perception	Soft, Fluid, Continuous	Hard, Rigid, Abrupt
Emotional Response	Calming, Welcoming	Alerting, Potentially Harsh
Neurological Reaction	Positive Affect + Reward Activated	Neutral or Avoidance-triggered Reactions

Evolutionary Perspective



Curves Are Associated with Biophilia

The Biophilia Hypothesis +
Emotional Benefits.





Understand the Emotional Impact of Shape



Why This Matters in Schools



Symmetry vs. Asymmetry

SYMMETRY

Order
Calm
Predictability

ASYMMETRY

Interest
Creativity
Flexibility



Why Psychology + Cognition Matter in Design



Core Research Themes + Insights



Curvilinear vs Angular Forms

Curvilinear

Activate Reward
centers in brain

Calming +
Approachable

Curves easier for
brain to process
visually

Creative
environments

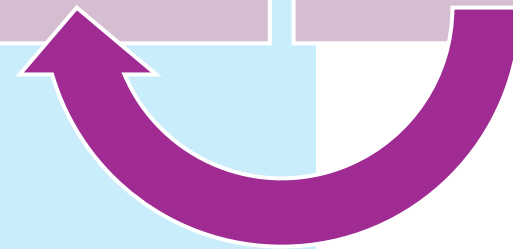
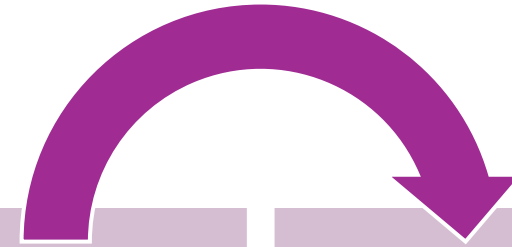
Angular

Sharp edges can
trigger avoidance

Promotes alertness

Can increase
feelings of formality -

Testing / formal
environments



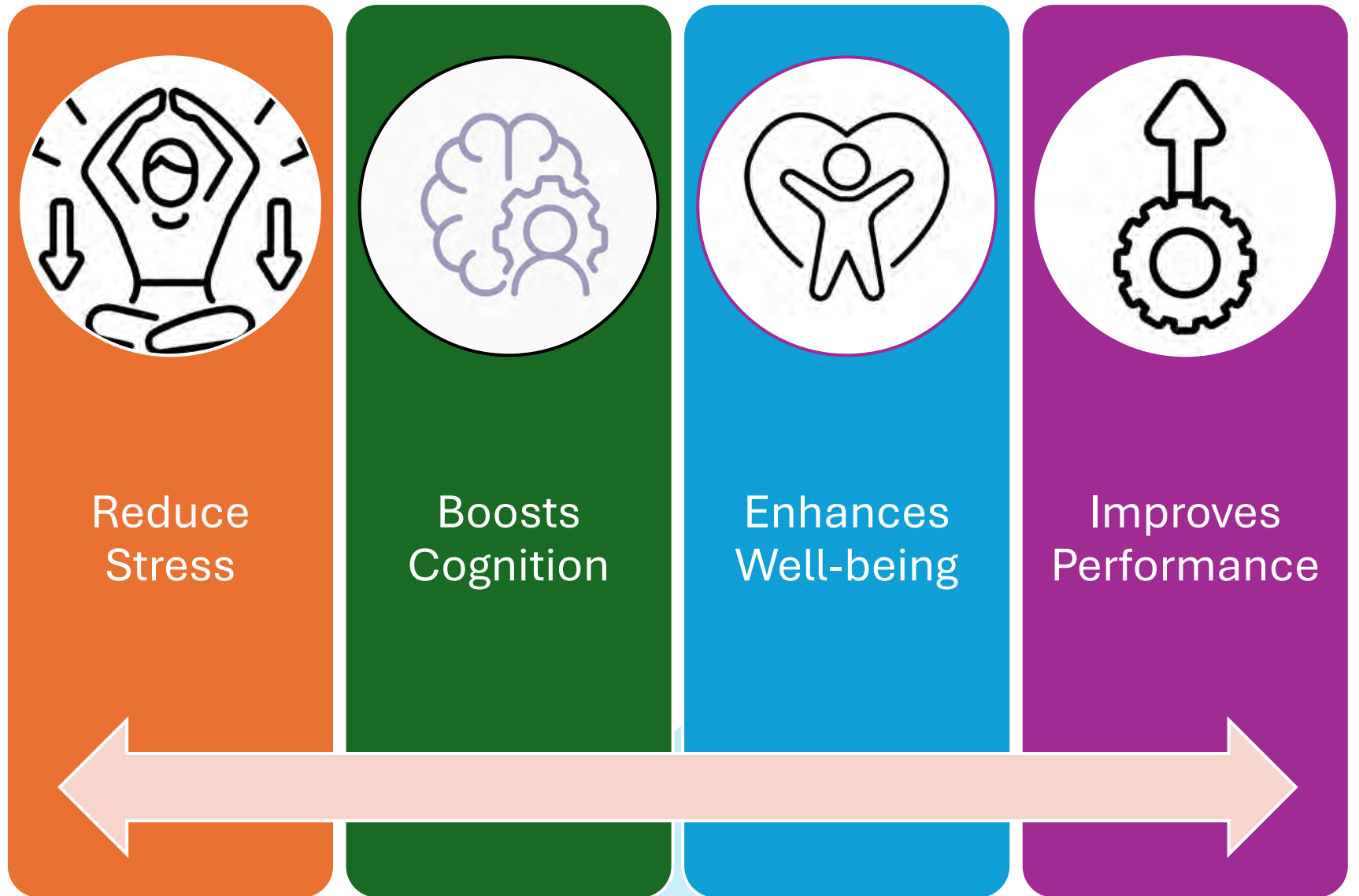
Choice Drives Learning

↑ 23%



Biophilic Design + Nature Inspired Forms

Matter in School Design



Neurodiversity + Sensory Processing

Thoughtful design – using soft shapes, calming zones + sensory-friendly materials – helps regulate stimulation.





Circle: Promotes inclusion, equality + group dialogue



Hexagon: Encourages collaboration + modular flexibility



Triangle: Ideal for pair work or triads – balanced visibility



Square – Single focus, structure + task completion



Flower: Fosters creative group energy + open conversation



Half Moon: Creates soft boundaries for focus or 1:1 interaction



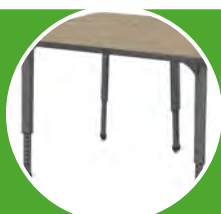
Kidney: Supports guided reading, small group teaching



Wave: Softens transitions between zones; softens flow



Chevron: Visually dynamic, supports direction flow and collaboration



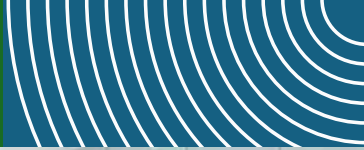
Trapezoid: Total versatility. Alone, pair, grouped. Sense of flow.



2

Apply shape-driven design
for solo and group learning





Core Principles to
Apply for All Spaces

Function Follows Form

Use shape to cue behavior:

Round = Collaborate

Angular = Focus



Zoning Through Shape

Zones help guide students to the right mindset and task.



Biomorphic and Curvilinear Integration

Natural, non-linear shapes to reduce stress and support sensory regulation.



Contrast for Clarity

Use contrasting shapes to distinguish spaces:

Structured zones = Angular

Creative or calming zones = Curved



Circulation as Design Language

Design pathways and circulation flow to reduce congestion and behavioral tension.





Practical Applications by Space Type

SPACE	SHAPE STRATEGY	OUTCOME
Classrooms	Mixed curves and angles	Focused work + peer interaction
Libraries	Round reading nooks, curved shelves	Calm and invitation to explore
Commons	Modular hex tables, soft-edge seating	Fluid collaboration + easy reconfiguration
Hallways	Curved dividers, angled lockers	Smooth traffic flow, reduced tension
SEL/Sensory Rooms	Rounded lounge zones, organic lighting	Emotional regulation and sensory safety

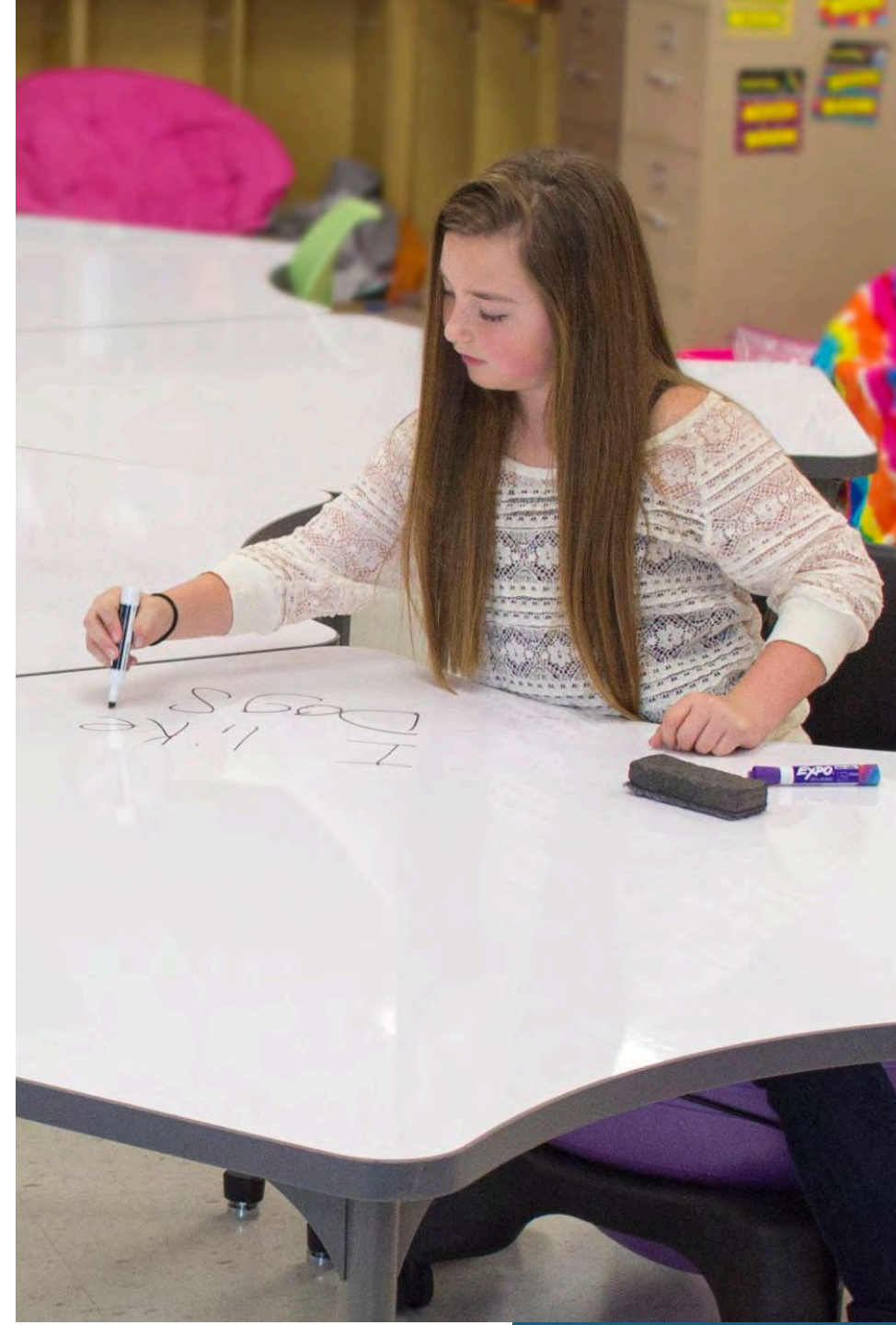
Effective learning environments are shaped—literally—by design.



Classroom Design Can Influences Academic Progress

↑ 25%

Individual Learning: Zones for Solo Focus



Visual + Spatial Separation



Curved or Hooded Elements



Soft Boundaries



Micro-Zoning Within Classrooms



Lighting + Color Matters





Group Learning



Inclusive Table Geometry



Flexible, Modular Configurations



360° Accessibility



Defined, Yet Open Zones



Standing Height or Tiered Options



Individual vs Group Summary





Integrate shape-driven
③ design with UDL (Universal
Design for Learning)

Universal Design for Learning

**“When a flower doesn’t bloom, you fix
the environment in which it grows, not
the flower.”**

— Alexander den Heijer



The shape of furniture plays a powerful role in how all students feel, engage and perform.



Flexible, Modular Configurations

12%

HIGHER TEST SCORES



UDL Three Core Principles

ENGAGEMENT

GOAL

*Stimulate interest,
motivation +
emotional safety*

APPLICATION

Use curved forms,
round tables, variety
of shapes for choice

REPRESENTATION

GOAL

*Present info in
different ways to
support
understanding*

APPLICATION

Zone thru shapes to
visually distinguish
between modes

ACTION + EXPRESSION

GOAL

*Allow students to
show what they
know in different
ways*

APPLICATION

Modular and
reconfigurable
shapes support
movement/flexibility.

UDL isn't just about accessibility. It's about **designing for everyone from the start**—and shape is one of the most powerful, underleveraged tools in that effort.





4

Translate design theory into
real-world applications



Shapes in early learning environments are not just aesthetic choices—
they are **developmental tools**



By combining geometric shapes for structure and modularity with organic shapes for comfort and emotional safety, this space supports a full range of learning modes—from focused, individual work to active group collaboration



The Power of Pivot: With minimal effort, students pivot from focused, individual learning to dynamic, collaborative work



Zoning through shape: Curves define spaces without walls, making the library more flexible and student-friendly



In a STEM/STEAM space, offering varied table shapes, heights, and postures transforms the room into a responsive lab.

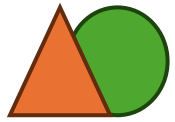


Blend organic shapes, soft edges, and nature-inspired elements to create a calming, engaging space.

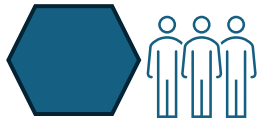


A central hub for connection and collaboration, with a mix of table shapes, lounge seating, and posture options.

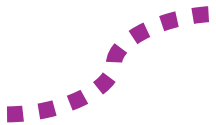
Key Learnings



Shape = Silent Instruction



Match Shape to Mode



Zone Without Walls



Design for All



Real-World Impact

Shape is More than
Design...
It's Direction.





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Thank You.

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