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The Potential for Educational Architectural Design to Foster Mental Health and Well-being

PECOS-BARSTOW-TOYAH



INDEPENDENT SCHOOL DISTRICT



VLK|ARCHITECTS

2024 A4LE|SOUTHERN REGIONAL CONFERENCE

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AGENDA

MENTAL HEALTH IN EDUCATION

EFFECTS OF MENTAL HEALTH ISSUES

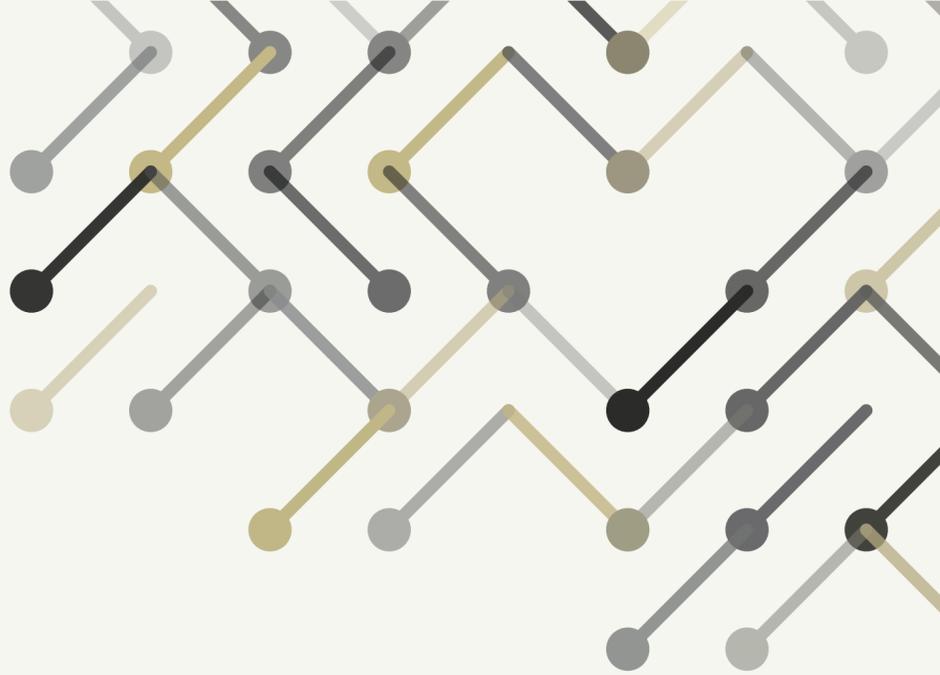
SOLUTIONS THROUGH ARCHITECTURAL DESIGN

ON THE BOARDS

Q & A

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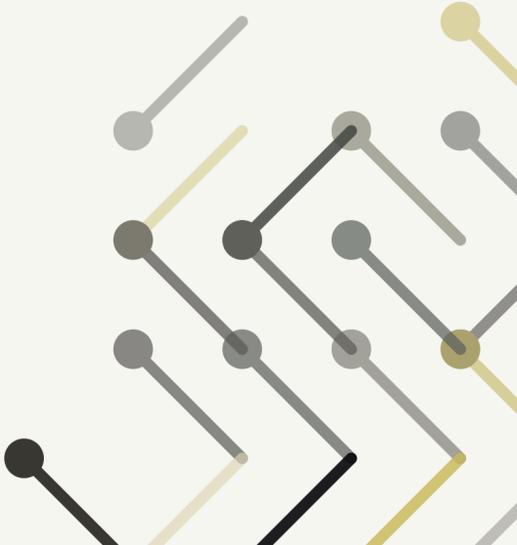




Mental Health in Education



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MENTAL HEALTH IN EDUCATION

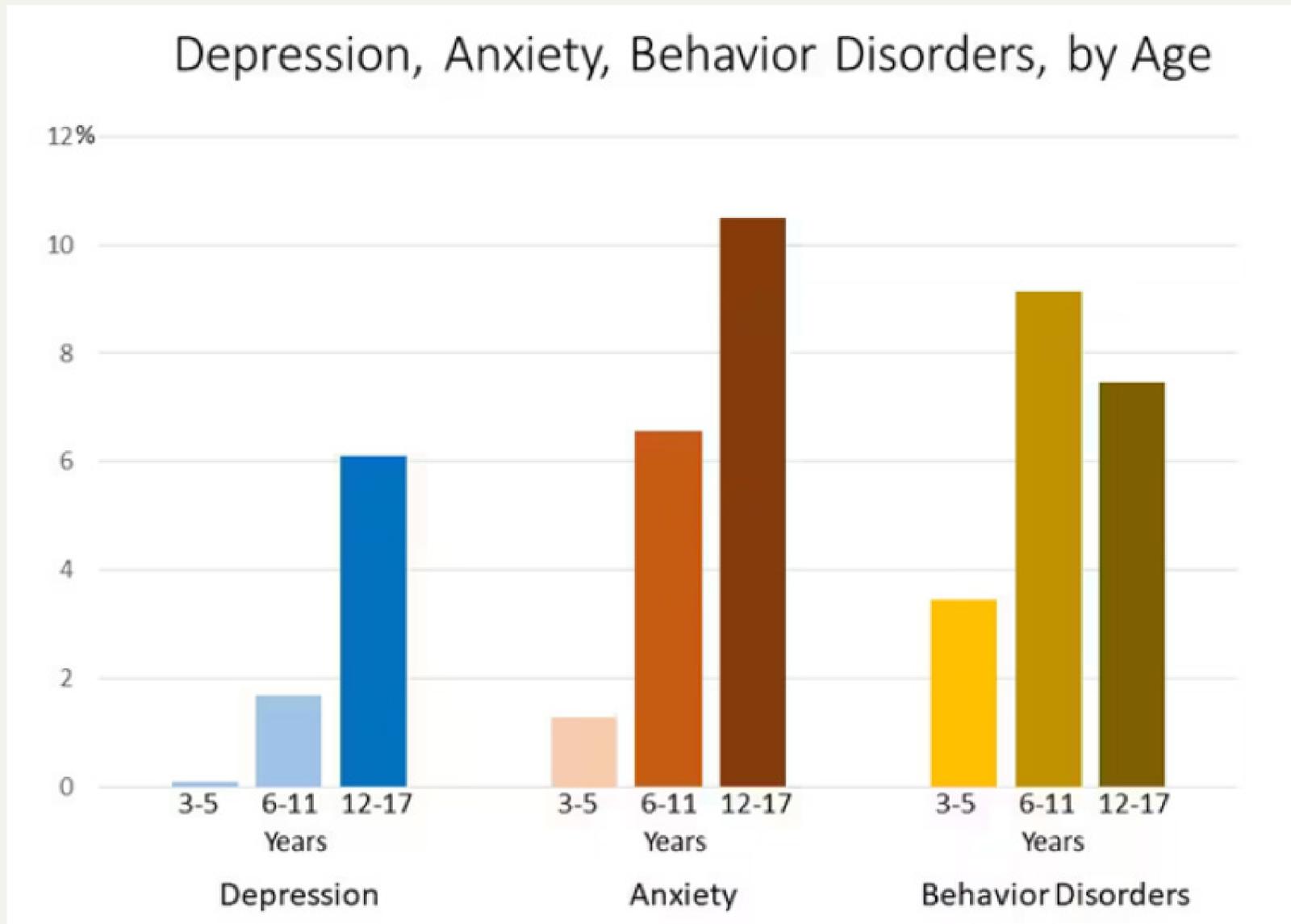
STUDENT MENTAL HEALTH

STATISTICS

- Approximately 1 in 5 youth aged 13-18 experiences a severe mental disorder at some point during their life *(National Alliance on Mental Illness (NAMI))*
- Suicide is the second leading cause of death among individuals aged 10-24, with rates increasing over the past decade. *Centers for Disease Control and Prevention (CDC)*
- Many mental health conditions first appear in youth and young adults, with 50% of all conditions beginning by age 14 and 75% by age 24.

MENTAL HEALTH IN EDUCATION

STUDENT MENTAL HEALTH



“A longitudinal study revealed a significant increase in the prevalence of depression among adolescents aged 12-17 over the past decade.”
- *Journal of Adolescent Health*



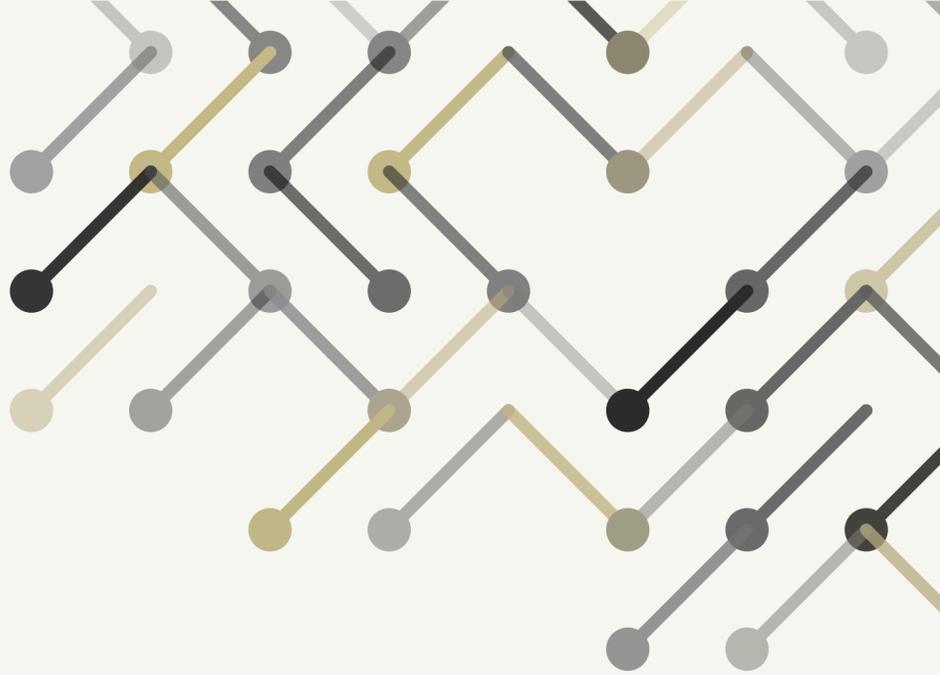
MENTAL HEALTH IN EDUCATION

EDUCATOR MENTAL HEALTH

STATISTICS

- 61% of teachers report that their work is always or often **stressful**, and 58% say their **mental health is not good** for 7 or more days a month. *(American Federation of Teachers (AFT))*
- 27% of teachers report experiencing high levels of **burnout**, which can lead to increased **absenteeism** and **turnover rates**. *(Journal of Educational Psychology)*
- The COVID-19 pandemic exacerbated mental health challenges for educators, leading to consideration leaving the profession
- Educators faced additional stressors, such as transitioning to online teaching, concerns about student well-being, adapting to changing guidelines, and fears of contracting the virus

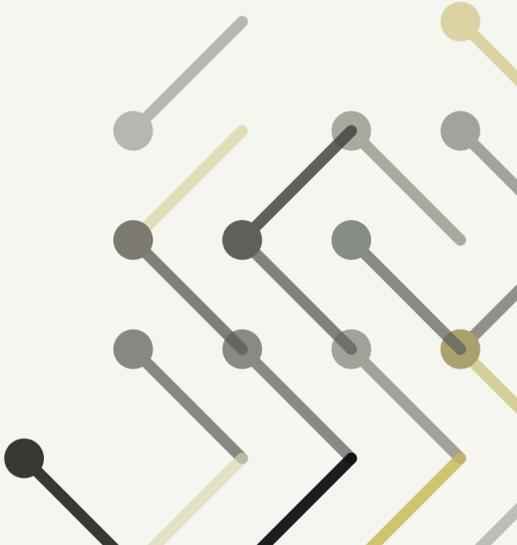




Effects of Mental Health Issues



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EFFECTS OF MENTAL HEALTH ISSUES

STUDENT ACADEMIC PERFORMANCE

- Student difficulties
 - Concentrating
 - Retaining information
 - Completing assignments
- Negative impact on cognitive functioning, memory, and executive functioning skills
- More likely to miss school days, leading to academic disengagement and falling behind in coursework
- Untreated mental health disorders lead to engagement in risky behaviors
 - Substance abuse or delinquency, further disrupting their academic performance and school engagement
 - Dropping out of school
 - Long-term consequences for employment opportunities
 - Overall well-being

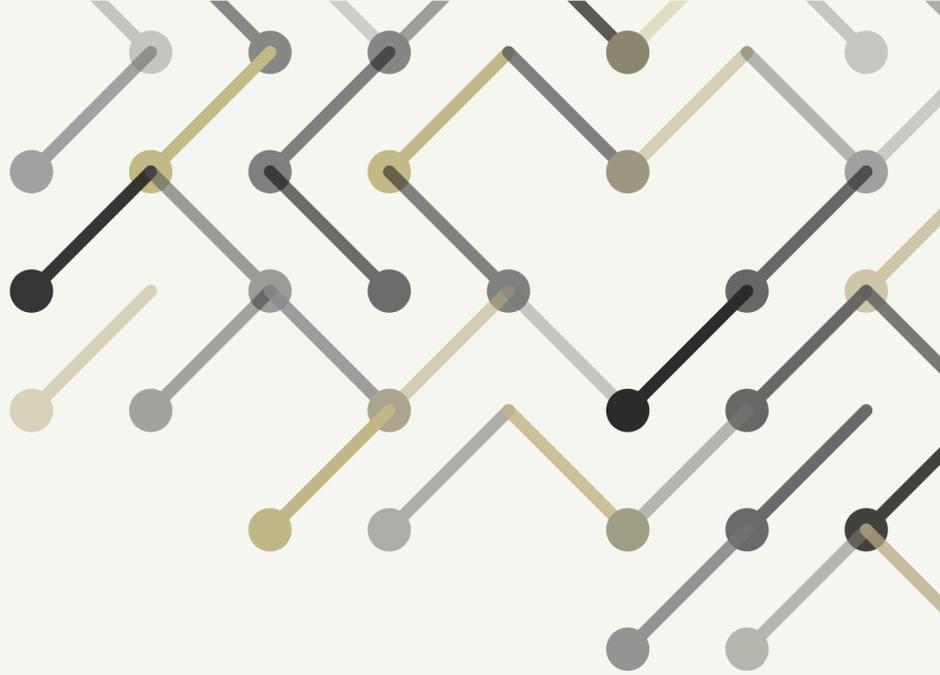
AFFECTS OF MENTAL HEALTH ISSUES

EDUCATORS

- Emotional Strain
- Decrease Job Satisfaction
- Impaired Performance
- Increased Absenteeism and Turnover
- Impact on Personal Relationships
- Professional Isolation and Stigma

“I’ve been teaching for over a decade, but this past year has been the hardest. I feel exhausted all the time, and no matter how much effort I put in, it never feels like enough. It’s affecting my relationships and my overall happiness.”

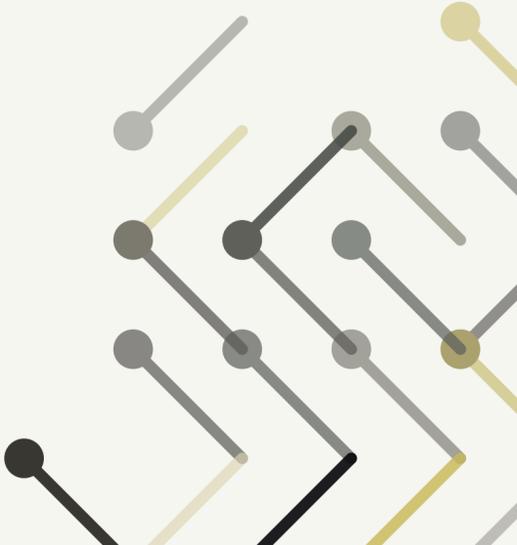
- Educator



Solutions Through Architectural Design



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SOLUTIONS THROUGH ARCHITECTURAL DESIGN

Schools can establish safe and supportive environments

Designing educational spaces to support K-12 mental health and well-being involves creating environments that promote feelings of **safety**, **comfort**, and **belonging** while accommodating the diverse needs of students

- Natural light
- Outdoor learning environments
- Flexible learning spaces and collaboration
- Safety and security



SOLUTIONS THROUGH ARCHITECTURAL DESIGN

NATURAL LIGHT

- Access to natural light
 - Improves mood, productivity, and overall well-being
- Large windows, skylights, and open atriums can maximize daylight penetration
- Biophilic elements such as indoor plants, green walls, natural & sustainable interior materials or outdoor gardens
 - Connect students with nature
 - Reduce stress levels
 - Linked to enhanced cognitive function, creativity, and emotional resilience



SOLUTIONS THROUGH ARCHITECTURAL DESIGN

OUTDOOR LEARNING SPACES

Supports students' mental wellness by addressing physical, emotional and social and environmental factors and can contribute to a positive school climate to enhance students' overall well being

- Enhanced mood and stress reduction
- Improved attention and concentration
- Connection with nature
- Sensory responsive environments
- Social interaction and support

“In science, we have a balcony that comes off the science lab that we can go on and we can do our work outside. We can be in the outdoor environment, but still connected to our science classroom. It helps you focus.”

- Educator



SOLUTIONS THROUGH ARCHITECTURAL DESIGN

FLEXIBLE AND MULTI-FUNCTIONAL SPACES

- Flexible learning environments that can adapt to various teaching methods, activities, and student needs.
- Incorporate movable furniture, modular partitions, and adaptable layouts to facilitate collaborative learning, independent study, and group discussions
- Design multi-functional spaces that serve multiple purposes throughout the day, such as classrooms that can transform into presentation areas, quiet zones, or breakout rooms for small group activities.



SOLUTIONS THROUGH ARCHITECTURAL DESIGN

SAFETY AND SECURITY

- Prioritize safety and security measures
 - Perimeter Fencing
 - Security Vestibules
 - Sliding Markerboards
- Secure entry systems, surveillance cameras, and emergency alert systems to mitigate potential risks and threats
- Clear wayfinding signage, well-defined circulation paths, and accessible exits to promote a sense of safety and preparedness in case of emergencies



SOLUTIONS THROUGH ARCHITECTURAL DESIGN

SENSORY RESPONSIVE ENVIRONMENTS

- Sensory needs conducive to concentration, relaxation, and sensory modulation
 - Acoustical treatments, sound-absorbing materials, and noise-reducing strategies
 - Adjustable lighting
 - Temperature control
 - Tactile elements



SOLUTIONS THROUGH ARCHITECTURAL DESIGN

SOCIAL CONNECTION WITH COMMUNITY

- Spaces that encourage social interaction, collaboration, and positive relationships
- Inviting gathering areas, lounges, and commons to connect with peers and mentors
- Informal meeting spaces, outdoor plazas, or courtyard gardens to serve as hubs for socializing, recreation, and relaxation, fostering a sense of community and belonging



SOLUTIONS THROUGH ARCHITECTURAL DESIGN

SUPPORTING EDUCATORS

Teachers must possess the capacity, resources and space to facilitate opportunities that result in deep learning.

Student experiences essential for deep learning require purposeful planning and teachers who have the capacity to engage in conversation and connect with colleagues to design lessons that promote student agency *(Wilson Smith & Colby, 2007)*



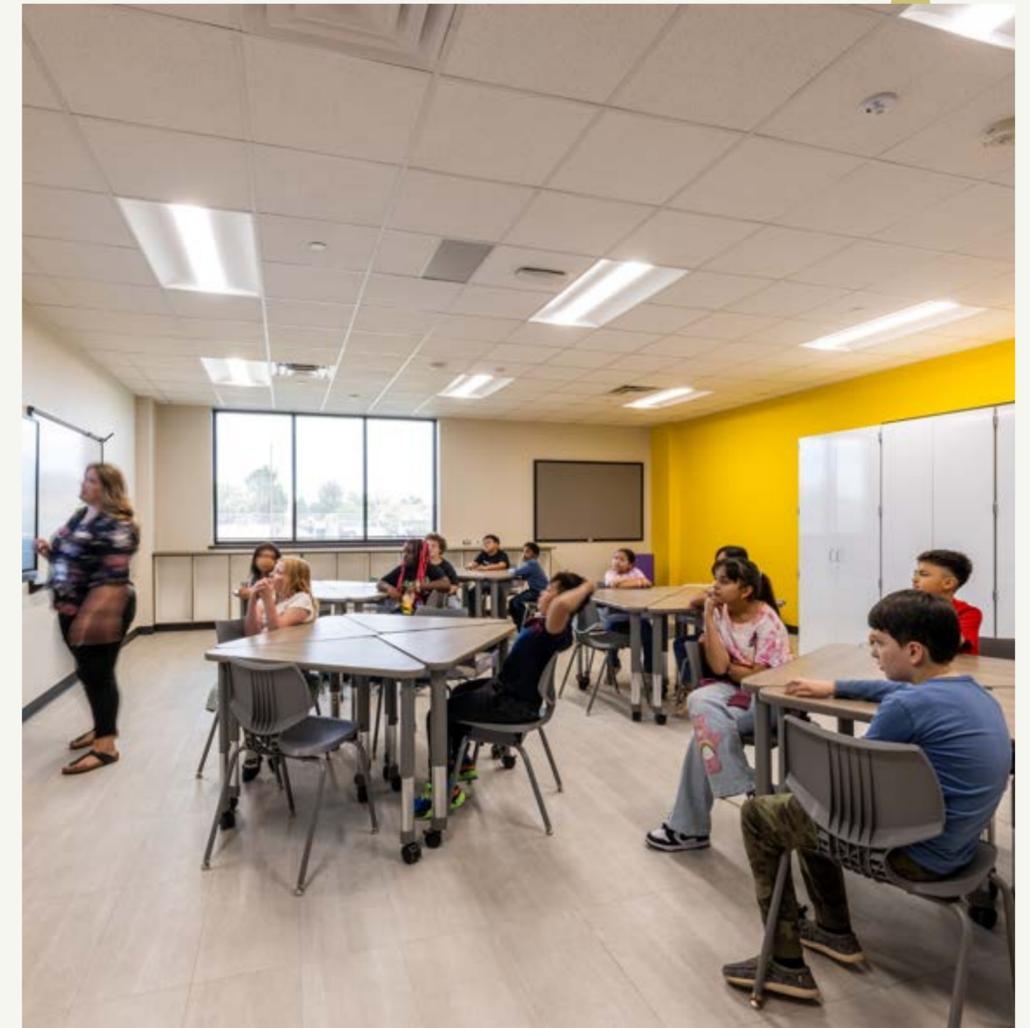
SOLUTIONS THROUGH ARCHITECTURAL DESIGN

SUPPORTING EDUCATORS

WELL EQUIPPED CLASSROOMS

- Flexible Furniture Arrangements
 - Different Teaching Methods
 - Different Group Sizes and Activities
 - Comfort and Movement Throughout Day
- Integrated Technology Infrastructure
 - Seamless integration for delivery of dynamic and engaging lessons, access educational resources, and facilitate digital collaboration among students
- Ample Storage and Organization
 - Teaching resources
 - Clutter-free and efficient learning environment

One teacher indicated flexible learning spaces give “students, of all varying abilities and needs...different options of where to learn and collaborate with others.”



SOLUTIONS THROUGH ARCHITECTURAL DESIGN

SUPPORTING EDUCATORS

DEDICATED PLANNING ROOMS AND WORKSPACES

- Collaborative Planning Areas
 - Collaborate, brainstorm, and plan lessons together
- Quiet Retreat Space
 - Focused work, reflection, and recharge
 - Calm and secluded environment
- Privacy Rooms, Resource Libraries, and Professional Development Center
 - Access to a wide range of teaching resources, educational materials, and professional development opportunities
 - Print and digital resources, curriculum guides, instructional videos, and workshops led by educational experts



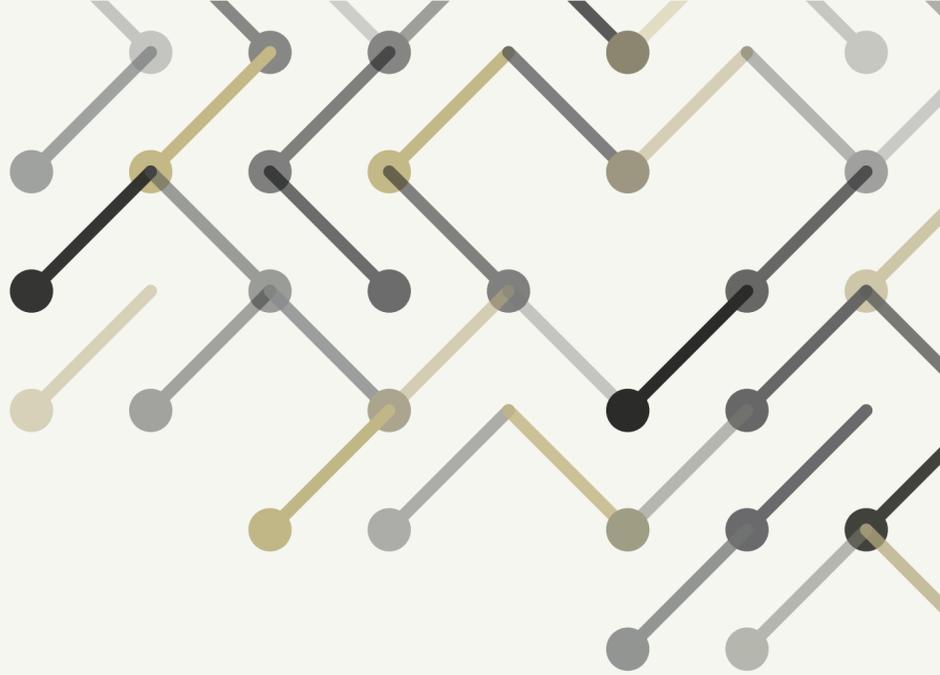
SOLUTIONS THROUGH ARCHITECTURAL DESIGN

SUPPORTING EDUCATORS

INCLUSIVE AND ACCESSIBLE DESIGN FEATURES

- Wide doorways
- Adjustable desks
- Accessible restrooms
- Consideration for sensory needs
 - Lighting, acoustics, and environmental comfort
 - Natural daylight, adjustable lighting fixtures, and sound-absorbing materials create comfortable and stimulating environments conducive to productivity and well-being for educators.

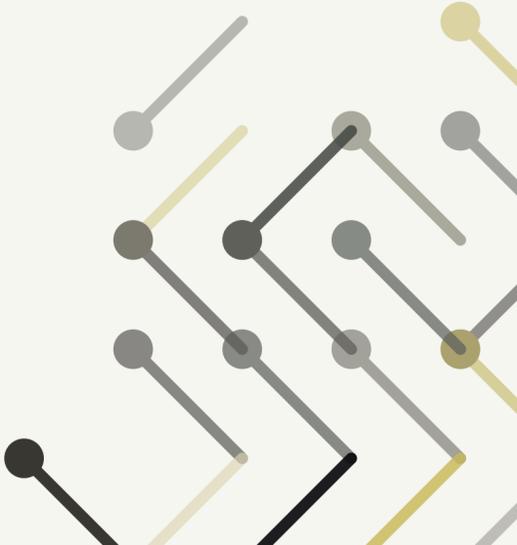




On the Boards



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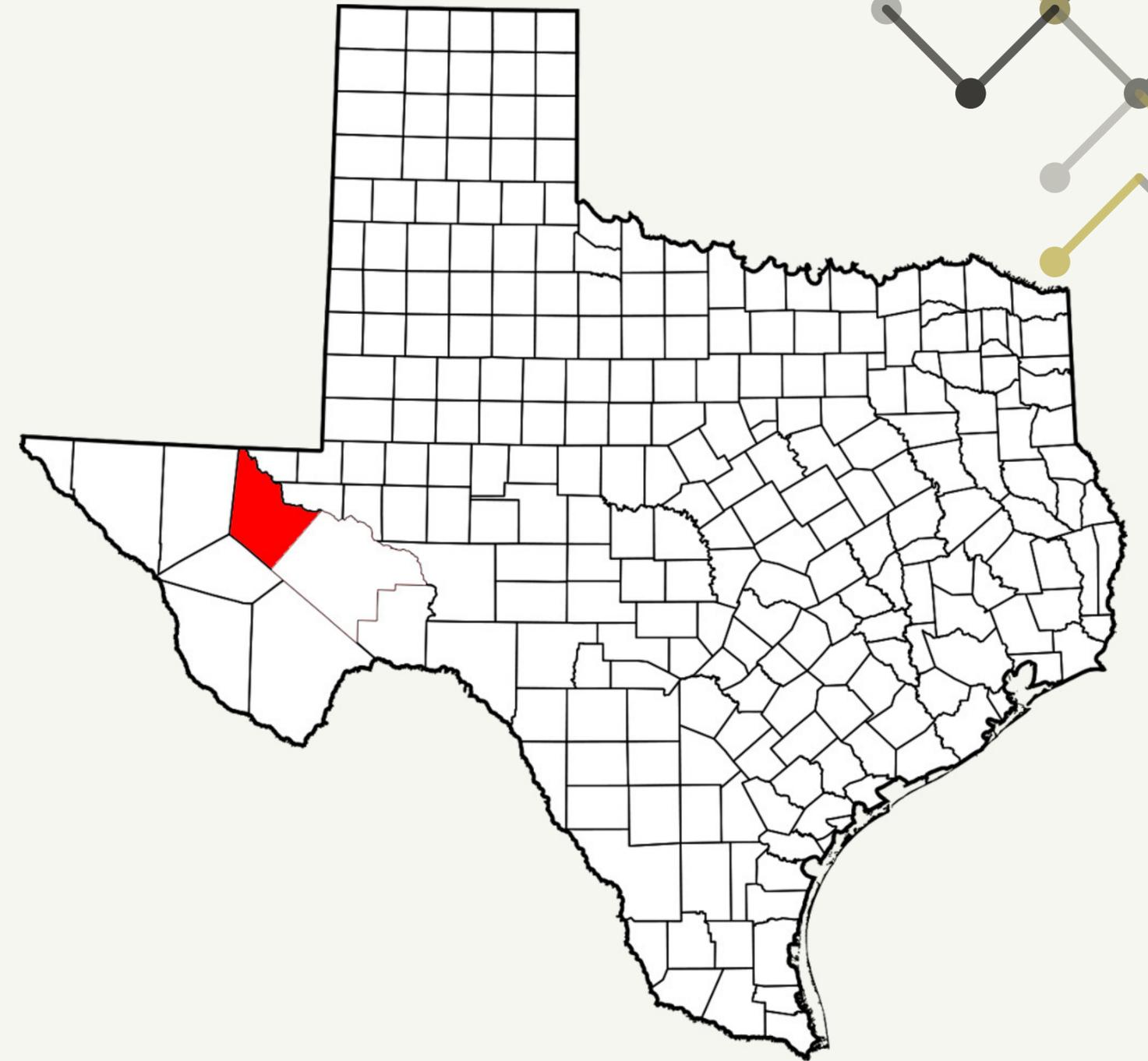
PECOS HIGH SCHOOL

BACKGROUND

- Located in rural West Texas
- Comprehensive Educational Program
- Significant role in the local community
- Cultural and demographic context
- Challenges and Opportunities

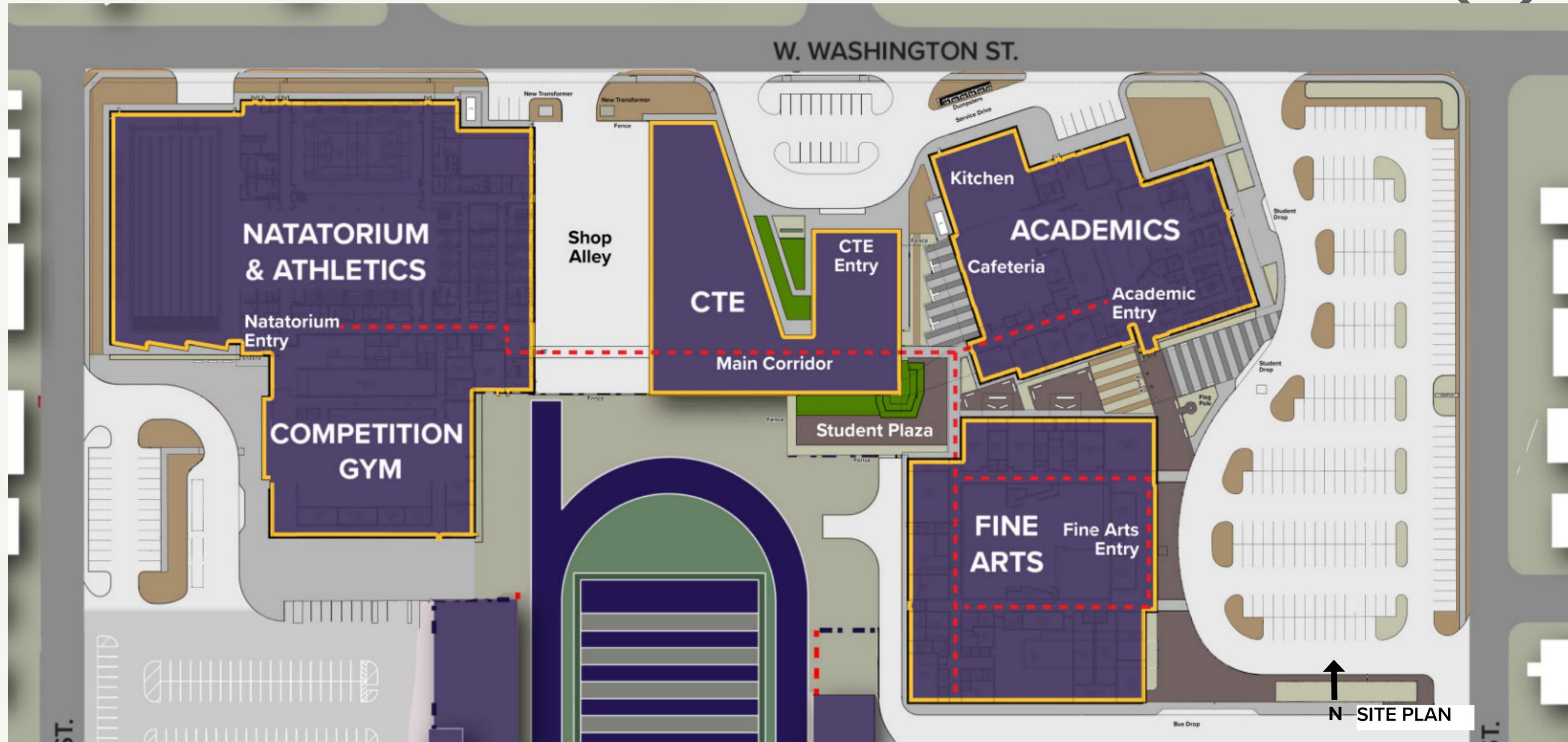
GOALS FOR MENTAL HEALTH

- Promote Awareness and Education
- Supportive Spaces and Resources
- Positive Relationships and Connections
- Early Intervention and Support
- Empowering Student Voice and Advocacy
- Culture of Wellness and Resilience



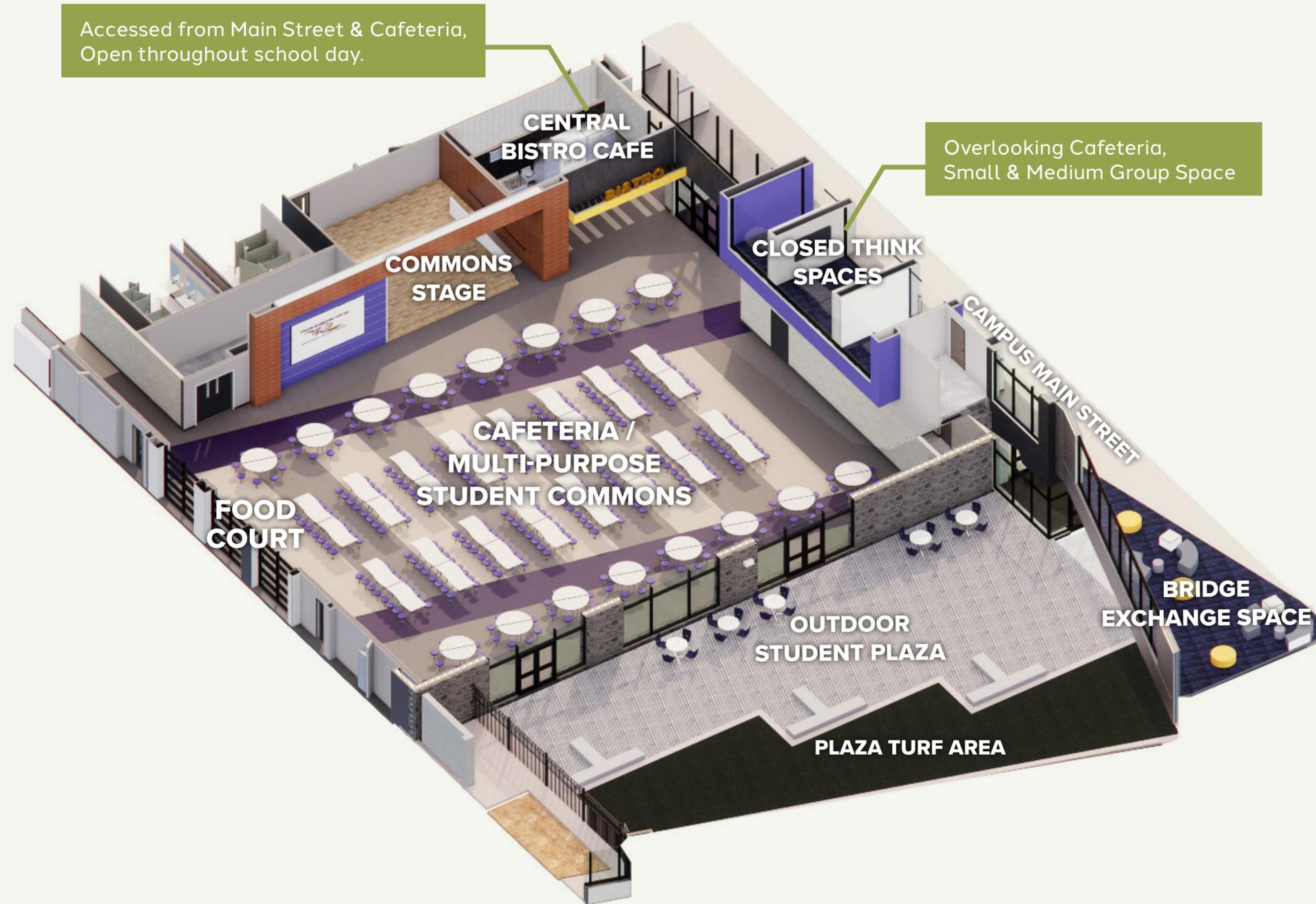
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PECOS HIGH SCHOOL - SITE PLAN



ON THE BOARDS

PECOS HIGH SCHOOL - CAFETERIA/STUDENT COMMONS FLOOR PLAN



LEVEL 1

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ON THE BOARDS

PECOS HIGH SCHOOL - MULTI-FUNCTIONAL, CAFETERIA, OUTDOOR SPACES



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ON THE BOARDS

PECOS HIGH SCHOOL - MULTI-FUNCTIONAL, CAFETERIA, OUTDOOR SPACES



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ON THE BOARDS

PECOS HIGH SCHOOL - MULTI-FUNCTIONAL, CAFETERIA, OUTDOOR SPACES



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ON THE BOARDS

PECOS HIGH SCHOOL - FLEXIBLE SPACES AND EXCHANGE SPACE



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ON THE BOARDS

PECOS HIGH SCHOOL - FLEXIBLE SPACES AND EXCHANGE SPACE



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PECOS HIGH SCHOOL - FLEXIBLE SPACES AND THINK SPACE



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ON THE BOARDS

PECOS HIGH SCHOOL - MULTI-FUNCTIONAL, BALCONY, BISTRO, OUTDOOR SPACES

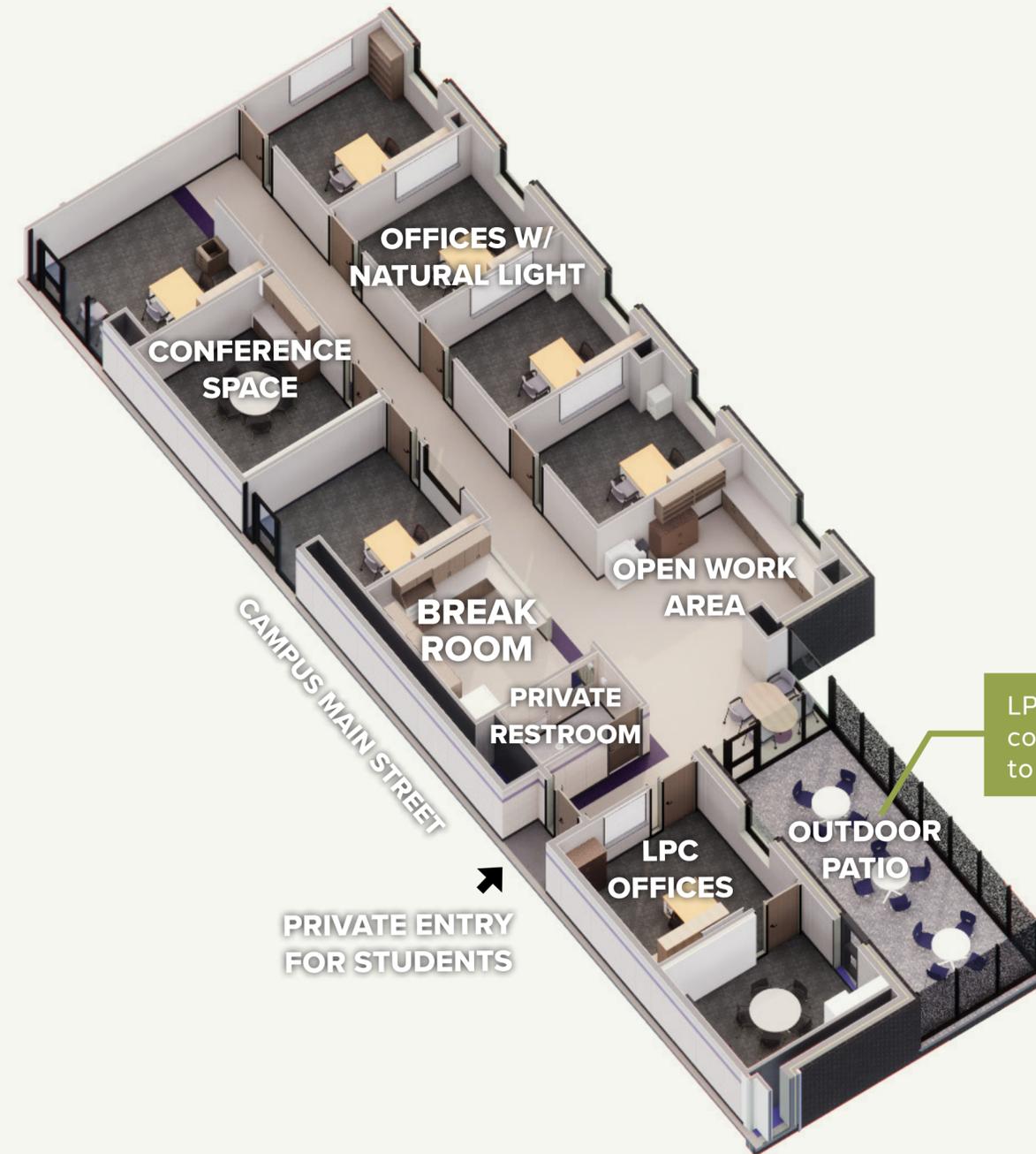


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PECOS HIGH SCHOOL - COUNSELOR & ADMIN SUITE FLOOR PLAN



LPC can take students outdoors to cool down, and Admin have access to private area away from students

LEVEL 2

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ON THE BOARDS

PECOS HIGH SCHOOL - TEACHER SUITES FLOOR PLAN



Accessed through
Teacher Zen Room

- Privacy Rooms
- Adjustable RGBW Lighting, Indirect/Direct
- Speaker System
- Lounge Privacy Furniture

LEVEL 3

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PECOS HIGH SCHOOL - TEACHER LOUNGE



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PECOS HIGH SCHOOL - TEACHER DESIGN LABS



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PECOS HIGH SCHOOL - TEACHER ZEN LOUNGE



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PECOS HIGH SCHOOL - ZEN LOUNGE PRIVACY ROOMS



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PECOS HIGH SCHOOL - TEACHER OUTDOOR BALCONY



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Q & A

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Thank you!



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