

Through the Lens of Trauma Informed Design



Saint Paul
PUBLIC SCHOOLS

Cunningham



Presenters



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Presentation Outline

1

Understanding Trauma and Trauma Informed Design

- Defining Trauma and Why It Matters to Designers
- What is Trauma Informed Design and How to Practice it

2

Applying a Trauma Informed Design Approach

- Bruce Vento Case Study
- Community Workshops



Latané

Schools That Heal



WISE

DESIGN FOR BELONGING

HM
683
.W57
2022

Steve Maslin Designing Mind-Friendly Environments



PETER
BLOCK

COMMUNITY

THE STRUCTURE
OF BELONGING

HM
756
.B56
2018

FOSTERING RESILIENT LEARNERS



Kristin Souers with Pete Hall



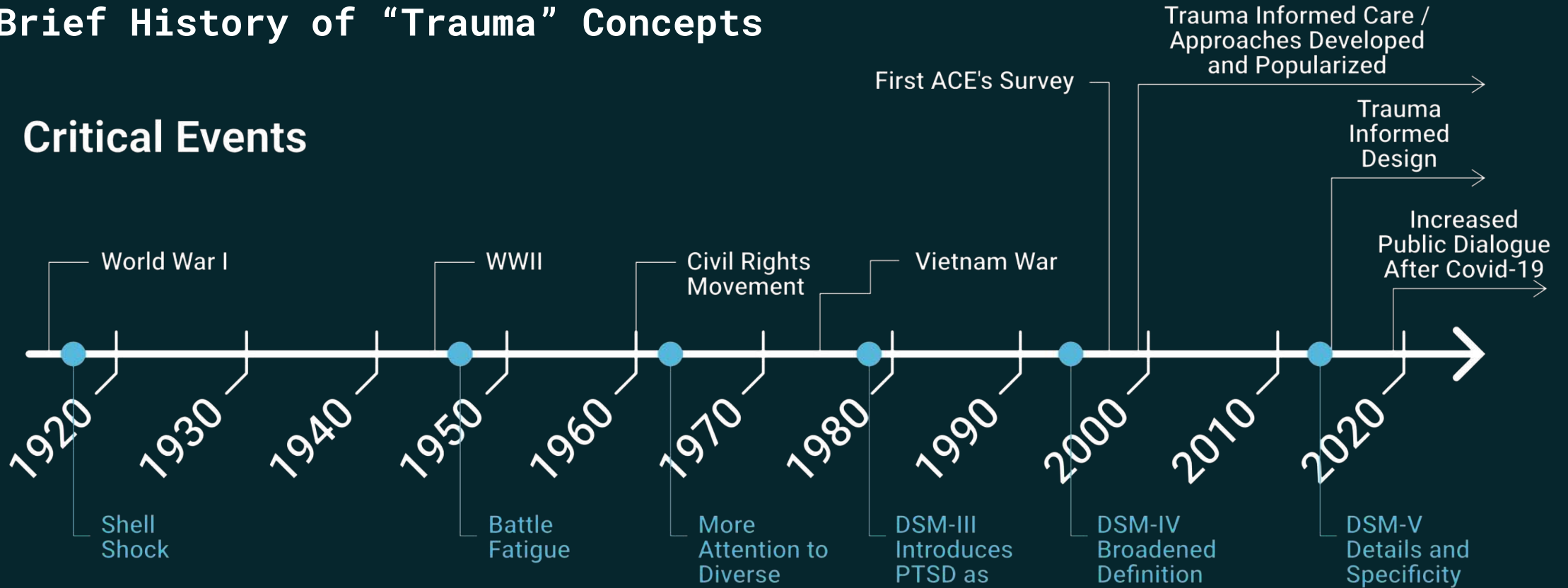
THE HAPPY DESIGN TOOLKIT

Ben Channon



A Brief History of "Trauma" Concepts

Critical Events



Diagnostic Developments



Trauma Informed Care / Approaches Developed and Popularized

Trauma Informed Design

Increased Public Dialogue After Covid-19

Defining “Trauma” for Trauma-Informed Approaches

“Individual trauma results from an **event, series of events, or set of circumstances** that is **experienced** by an individual as physically or emotionally harmful or life threatening and that has **lasting adverse effects** on the individual’s functioning and mental, physical, social, emotional, or spiritual **well-being**”

- SAMHSA’s Concept of Trauma -

The Adverse Childhood Experience (ACE) Survey

This study found **strong correlation** between co-occurring Adverse Childhood Experiences and health risk factors / diseases.

Felitti, V. J. et al., 1998. Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14(4), pp. 245-258.

National Center for Injury Prevention and Control, Division of Violence Prevention, 2021. *About the CDC-Kaiser ACE Study*. [Online] Available at: <https://www.cdc.gov/violenceprevention/aces/about.html> [Accessed 31 August 2022].

Common Categories of ACEs

1. Emotional / Psychological Abuse
2. Physical Abuse
3. Sexual Abuse
4. Parents in Abusive Relationship
5. Parents with Substance Abuse Problems
6. Household Member Depressed or Mentally Unwell
7. Household Member Went to Prison
8. Emotional Neglect*
9. Physical Neglect*
10. Divorced Parents*
11. Bullying*

**Added after the initial ACE study*

Felitti, V. J. et al., 1998. Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14(4), pp. 245-258.

Winninghoff, A., 2020. Trauma by Numbers: Warnings Against the Use of ACE Scores in Trauma-Informed Schools. *Occasional Paper Series*, 43(4).

Houtepen, L. C. et al., 2020. Associations of Adverse Childhood Experiences with Educational Attainment and Adolescent Health and the Role of Family and Socioeconomic Factors: A Prospective Cohort Study in the UK. *PLOS Medicine*, 17(3).

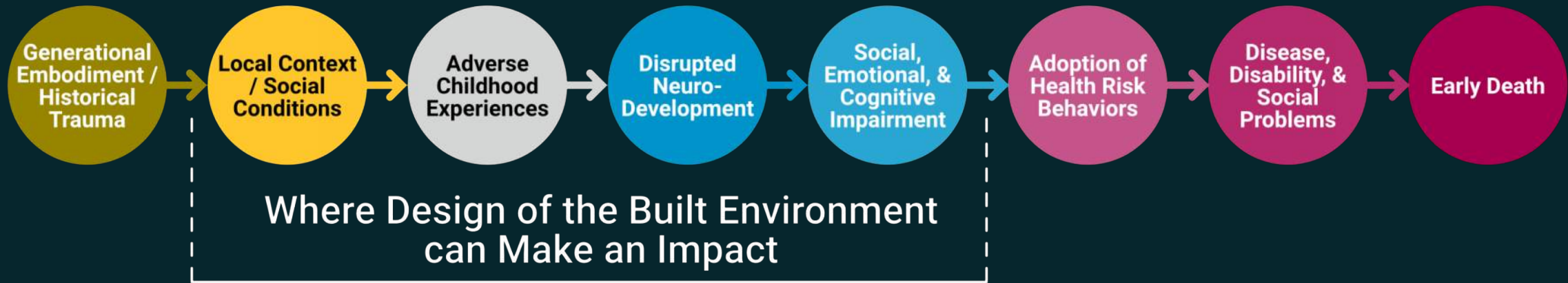
Results of the First ACE Study

Category	No Adverse Experiences	One	Two	Three	Four or More
Past Suicide Attempt	1.00	1.80	3.00	6.60	12.20
Injected Drug Use	1.00	1.30	3.80	7.10	10.30
Alcoholism	1.00	2.00	4.00	4.90	7.40
Illicit Drug Use	1.00	1.70	2.90	3.60	4.70
Depression	1.00	1.50	2.40	2.60	4.60
50+ Sexual Partners Over Lifetime	1.00	1.70	2.30	3.10	3.20
Had a Sexually Transmitted Disease	1.00	1.40	1.50	1.90	2.50
Current Smoker	1.00	1.10	1.50	2.00	2.20
Severe Obesity	1.00	1.10	1.40	1.40	1.60
Limited Physical Activity	1.00	1.20	1.20	1.40	1.30
Chronic Bronchitis / Emphysema	1.00	1.60	1.60	2.20	3.90
History of Hepatitis or Jaundice	1.00	1.10	1.80	1.60	2.40
Fair or Poor Self-Rated Health	1.00	1.20	1.40	1.40	2.20
Heart Disease	1.00	0.90	0.90	1.40	2.20
Cancer	1.00	1.20	1.20	1.00	1.90
Past Skeletal Fracture	1.00	1.10	1.40	1.20	1.60
Stroke	1.00	0.90	0.70	1.30	2.40
Diabetes	1.00	1.00	0.90	1.20	1.60

Expanded Results by Years of Additional Study

Domain of Dysfunction	No Adverse Experiences	One	Two	Three	Four
Substance Abuse					
Injected Drug Use	1.00	2.30	4.50	5.30	11.10
Alcoholism	1.00	2.00	2.90	4.50	7.20
Illicit Drug Use	1.00	1.60	2.20	2.90	4.50
Smoking	1.00	1.10	1.30	1.60	1.80
Mental Health Disturbances					
Depressed Affect	1.00	1.50	2.20	2.50	3.60
Panic Reactions	1.00	1.30	1.70	2.00	2.50
Hallucinations	1.00	1.10	1.60	2.00	2.70
Anxiety	1.00	1.20	1.70	1.80	2.40
Sexuality					
Early Intercourse	1.00	2.10	2.70	3.70	6.60
Promiscuity (> 30 partners over lifetime)	1.00	1.30	1.90	2.50	3.60
Sexual Dissatisfaction	1.00	1.10	1.50	1.50	2.00
Stress and Aggression					
Risk of Perpetrating Intimate Partner Violence	1.00	1.80	2.40	3.30	5.50
Difficulty Controlling Anger	1.00	1.40	2.20	2.30	4.00
High Level of Perceived Stress	1.00	1.20	1.40	1.50	2.20
Somatic Health Disturbances					
Adjusted Odds Ratio	1.00	1.30	1.80	1.60	2.70
Sleep Disturbance	1.00	1.20	1.60	1.80	2.10
Severe Obesity	1.00	1.30	1.40	1.50	1.90
Memory					
Memory Impairment	1.00	1.30	2.10	2.60	4.40

Tracing Causation - from ACEs to Negative Outcomes to Early Death



Where Design of the Built Environment can Make an Impact

Design a built environment that is **accessible** for those with social, emotional, & cognitive impairment, understanding the **challenges this population faces**

Understand impacts of disrupted development, and **anticipate these impacts** during design where relevant

Design the built environment to be **less likely to contribute** to traumatic events, and to **reduce events that may trigger** a trauma based response

Design to address **historical disinvestment** in built environment and meet current **context specific** socio-economic and environmental **challenges**

Design Approaches to Addressing Trauma Through Built Form

Passive

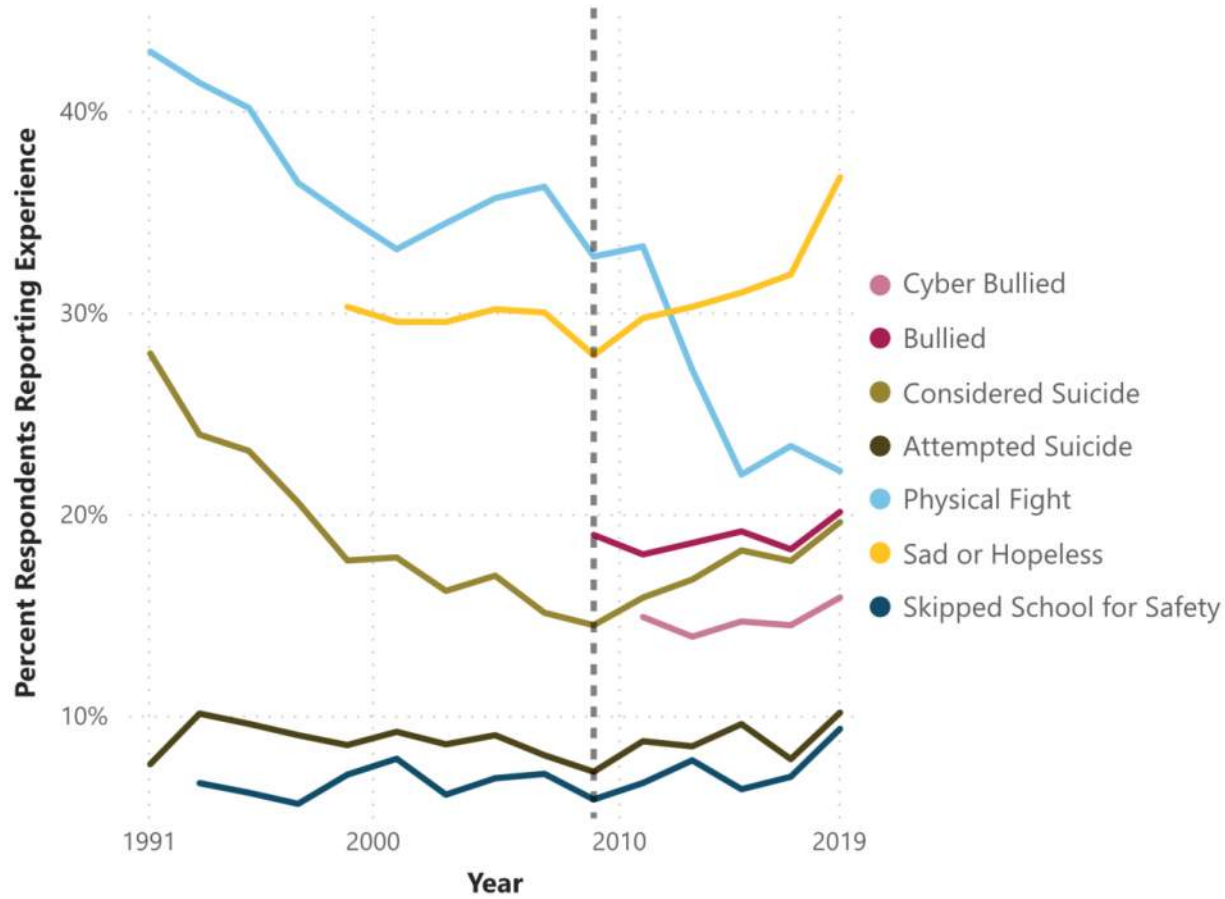
Spaces designed to be **less likely to trigger** trauma-based reactions by the nature of what is **included** in them and **what is not**

Intervening

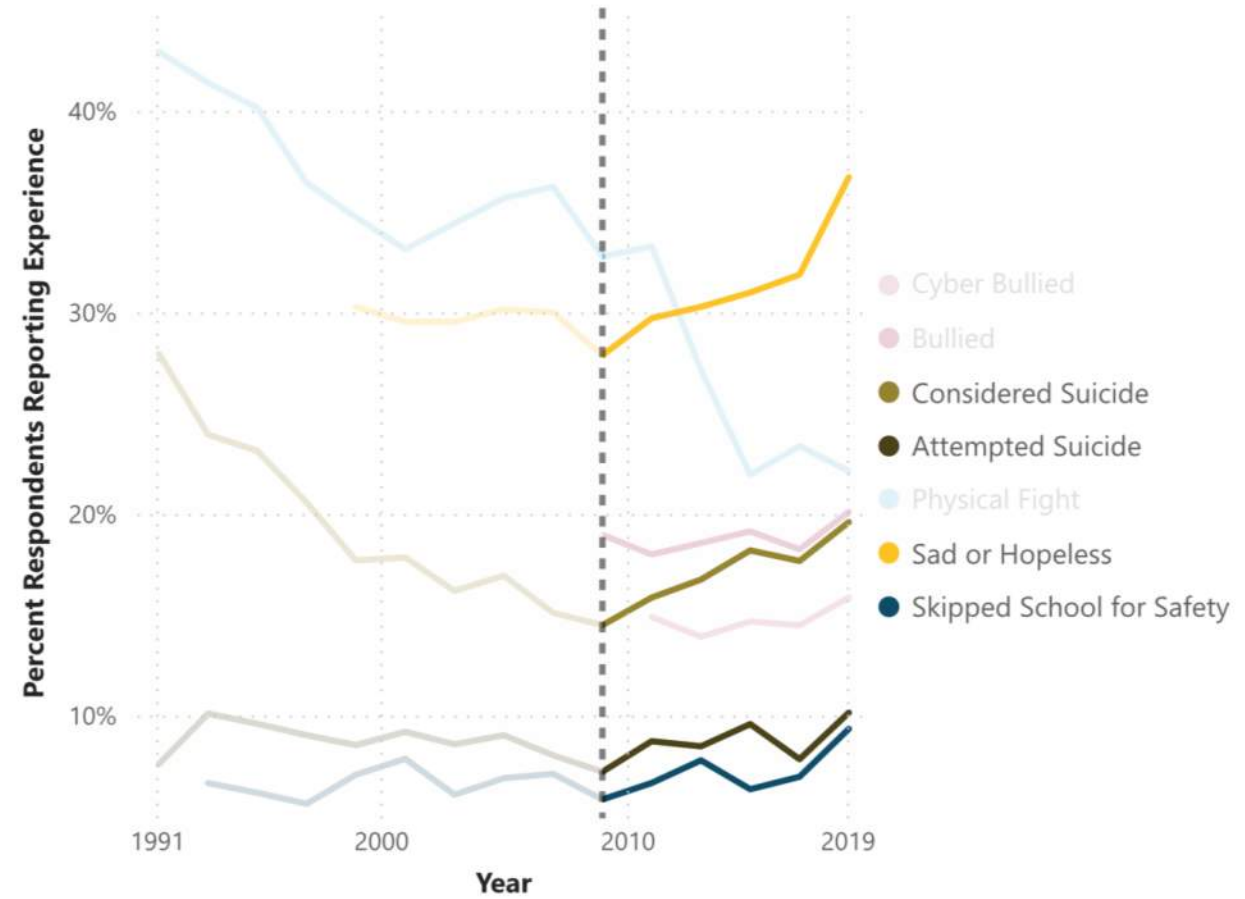
Spaces designed to **help** those who are currently experiencing a trauma-based reaction to **recover** in a **healthy and supported** manner

Increasing Prevalence of Mental Health / Safety Indicators in CDC Data

Youth Risk Behavior Surveillance System Trends



Youth Risk Behavior Surveillance System Trends



> 60%

Research indicates that trauma can negatively affect learning, motivation, memory, and focus for students. Prior to the COVID-19 pandemic, more than 60% of children experienced some type of trauma.

RethinkED October 10, 2022

Students in high-achieving schools are now named an ‘at-risk’ group, study says

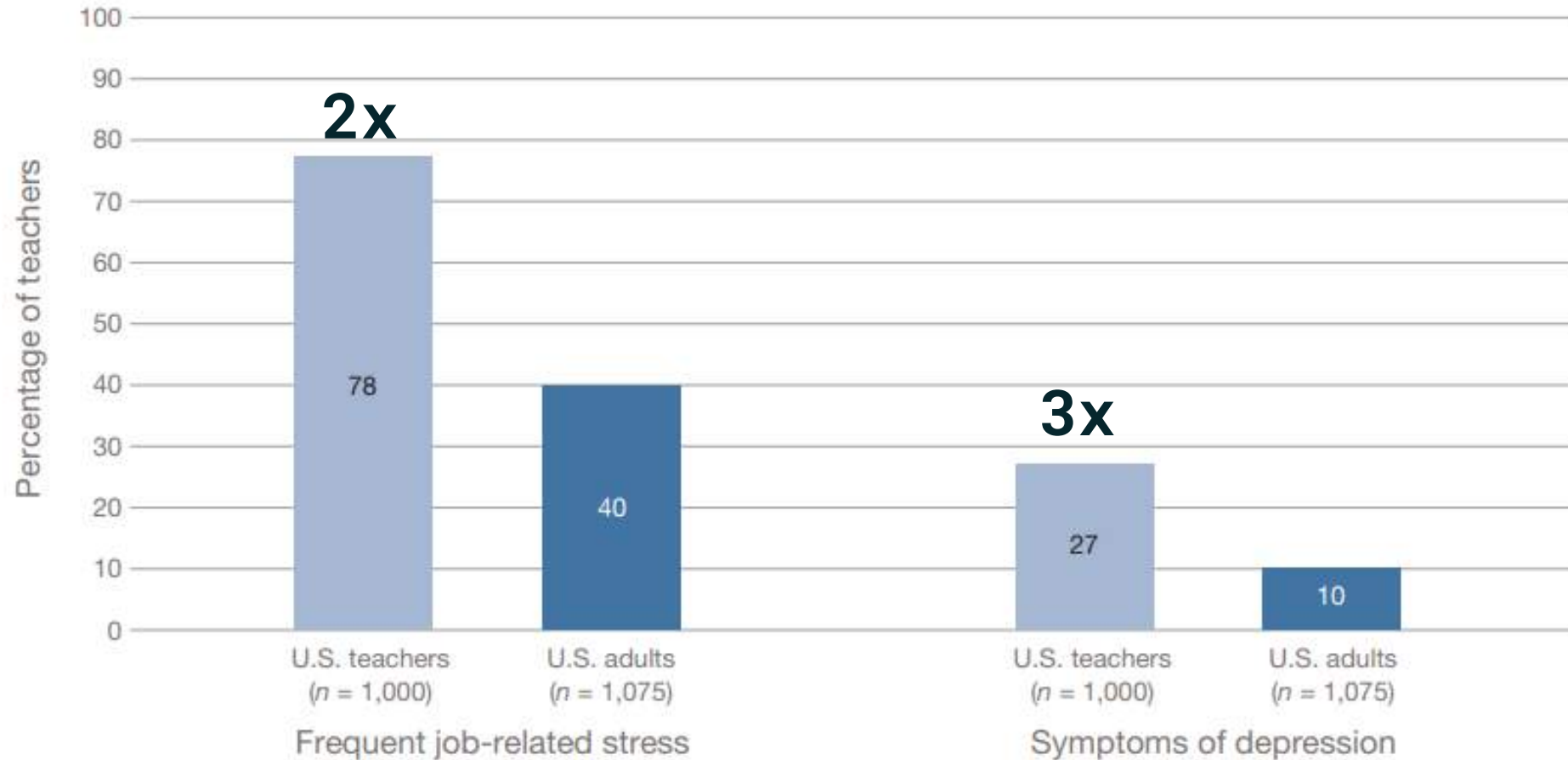
Perspective by Jennifer Breheny Wallace

September 26, 2019 at 9:00 a.m. EDT

“A consensus study report on advancing health equity among American children published this summer by the National Academies of Sciences, Engineering and Medicine added youths in “high achieving schools” to their list of “at-risk” groups, along with kids living in poverty and foster care, recent immigrants and those with incarcerated parents.

Last year, a report by the Robert Wood Johnson Foundation came to a similar conclusion when it named the **top environmental conditions harming adolescent wellness** – among them were **poverty, trauma, discrimination** and “**excessive pressure to excel, often, but not exclusively, occurring in affluent communities.**”

Job-Related Stress and Symptoms of Depression Among Teachers and Among the General U.S. Adult Population



SOURCES: Data for U.S. teachers are from our ATP survey. Data for frequent job-related stress among U.S. adults are from our ALP survey. Data for symptoms of depression among U.S. adults are from the Understanding America Study (University of Southern California Dornsife Center for Economic and Social Research, undated-a).

Schools can be a Source of Trauma

The Trauma-Sensitive Schools Training Package by the National Center of Safe Supportive Learning Environments includes the following possible triggers related to the built environment:

- Loud, chaotic environments
- Odors
- Physical touch
- Confinement
- Witnessing violence between other individuals, such as peers fighting
- Areas of school experienced as unsafe, such as bathrooms or less well-monitored areas
- Emergency vehicles and police or fire personnel

Triggers can result in a variety of **fight, flight, or freeze responses that can be easily misunderstood or mishandled** by staff who do not make the connection between the trigger and the current behavior.



SPPS's standard is to design schools to provide a safe and secure environment. Students, staff, visitors, and the community should be able to regard the school as a safe haven in which to meet, learn and work.

SPPS Facilities Standards



Trauma Informed Care Principles

1. Recognize that trauma-related symptoms and behaviors **originate from adapting to traumatic experiences**
2. View trauma in the **context of individuals' environments**
3. **Minimize risk of re-traumatization** or replicating prior trauma dynamics
4. Create a **safe environment**
5. Identify **recovery from trauma** as a primary goal
6. Support **control, choice and autonomy**
7. View trauma through a **sociocultural lens**
8. Foster **trauma resistant skills**
9. Develop strategies to **address secondary trauma** and promote self-care

**Principles that are not readily applicable to the design of the built environment have been excluded from this list*

Two Sets of Six Principles

SAMHSA's 6 Principles to a Trauma-Informed Approach

DRH 6 Principles for Trauma-Informed Design

Empowerment & Choice



Empowerment & Personal Control

Safety



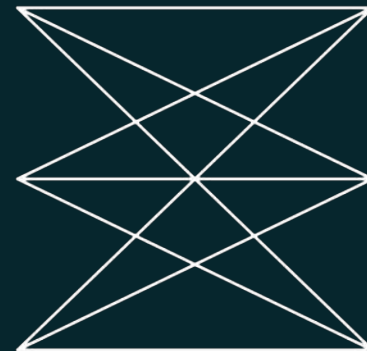
Security, Privacy & Personal Space

Peer Support



Sense of Community

Cultural, Historical & Gender Issues



Beauty and Meaning

Collaboration & Mutuality

Dignity & Self Esteem

Trustworthiness & Transparency

Stress Management

Pabel, J. & Ellis, A., 2015. Trauma-Informed Design: Definitions and Strategies for Architectural Implementation, Tallahassee, FL: Design Resources for Homelessness.

Substance Abuse and Mental Health Services Administration, 2014. SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach, Rockville, MD: Substance Abuse and Mental Health Services Administration.

Empowerment & Personal Control

Encourage individual agency, welcome self-expression and offer choice for occupants

This might mean:

- Pinup Space for Personalization
- Mirrors in Play / Recreation Areas
- Choice Between Variety of Furniture Types / Activities
- Operable Windows & Shades
- Space for Growing Plants and Hands-On Activities
- Writable Surfaces



Each strategy requires conversations with the community to understand what this means to them.

Safety, Privacy and Personal Space

Understand that perceived safety is crucial as basic safety. Prioritize clear wayfinding, sightlines and boundaries; minimize negative triggers; offer vantages of both prospect and refuge and paths of retreat; and recognize the role of program staff in creating a sense of safety and security

This might mean:

- Places of Refuge
- Clear Wayfinding
- Screened Boundary Conditions
- Inclusive Restrooms
- Passive Observation Sightlines



Each strategy requires conversations with the community to understand what this means to them.

Sense of Community

Create spaces that encourage camaraderie and collaboration and offer opportunities to belong

This might mean:

- Multi-Level Spaces
- Ties to Neighborhood, Community and Context
- Conversation Pieces
- Tailored Community Spaces
- Community Resources



Each strategy requires conversations with the community to understand what this means to them.

Beauty and Meaning

Honor culture and identity while creating spaces that spark and nurture imagination, hope and aspiration

This might mean:

- Culturally Relevant Designs
- Preference for Natural or Soft Materials
- Reduce Visual Complexity
- Calming Color Schemes
- Nature Walks and Learning Trails
- Accessible Courtyards
- Local Artwork



Each strategy requires conversations with the community to understand what this means to them.

Dignity and Self Esteem

Celebrate each individual's inherent worth, communicating positivity, emphasizing strengths, and maximizing potential

This might mean:

- Welcoming entry
- Thoughtful and well-designed storage
- Furniture and fixtures sized to occupant ages
- Use of side lighting near mirrors
- Project display spaces
- Equitable accessibility



Each strategy requires conversations with the community to understand what this means to them.

Stress Management

Cultivate a comfortable, calm ambiance that supports relaxation, self-soothing, stress management and coping through design details such as lighting, sound mitigation, natural elements and access to nature

This might mean:

- Plentiful Natural Lighting / Views
- Design for Ease of Cleaning
- Interior Lighting for Circadian Rhythms
- Seating Integrated into Windows
- Soft Textures and Forms



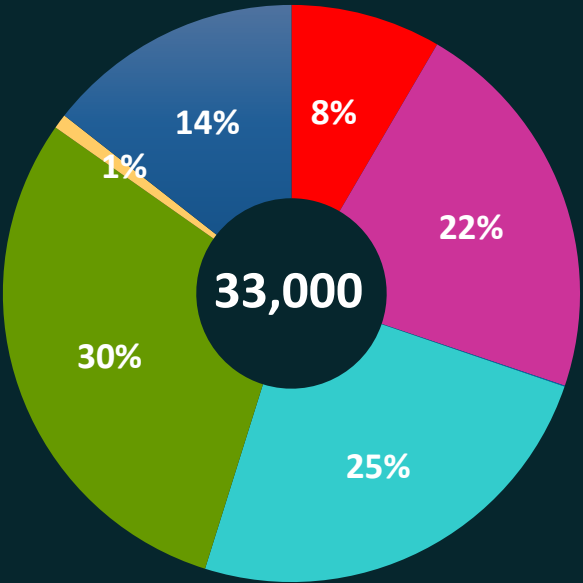
Each strategy requires conversations with the community to understand what this means to them.

Bruce Vento Elementary + Early Childhood Hub

**Applying Trauma Informed Design Concepts
in Early Phase Design of a New Project**

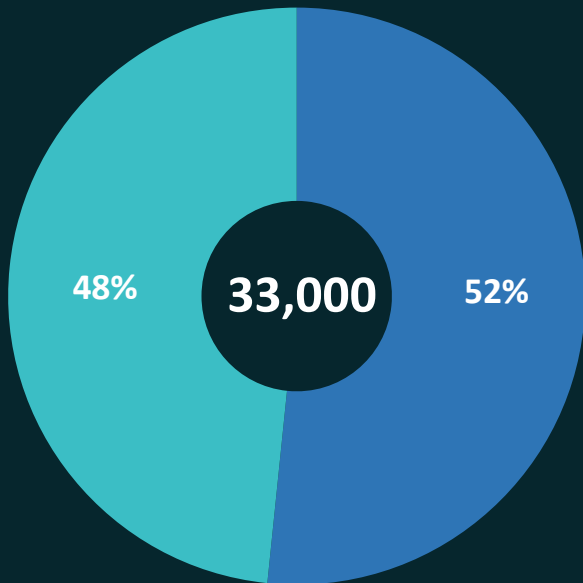
St. Paul Public Schools - At a Glance

SPPS Demographic – Student Race/Ethnicity



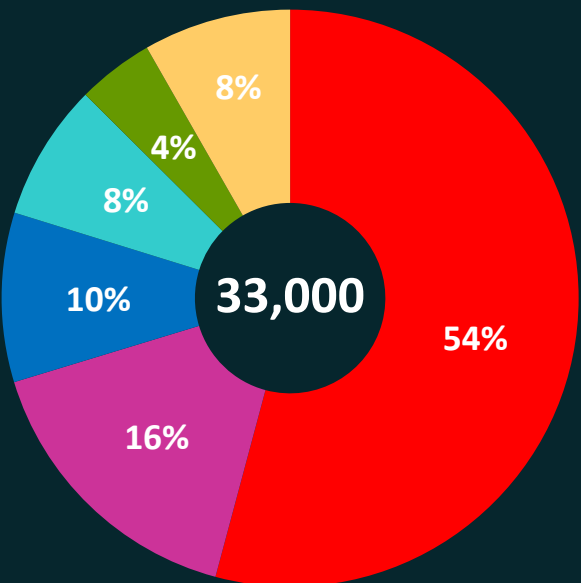
- Two or More Races
- White
- Native Hawaiian/Pacific Islander
- Black/African American

SPPS Demographic – Student Gender



- Male
- Female

SPPS Demographic – Student Home Language



- English
- Hmong
- Spanish
- Karen
- Somali
- Other

SPPS Achieves Framework

Systemic Equity

Objective 1:

Identify and address institutional and systemic inequities

Strategic Initiatives:

1.1) Develop and implement a system-wide Equity Plan as defined by Board Policy 101.00

Positive School and District Culture

Objective 2:

Create inclusive school and district cultures

Strategic Initiatives:

2.1) Implement culturally responsive Social Emotional Learning (SEL) district wide aligned with Positive Behavioral Intervention & Supports (PBIS)

Effective and Culturally Responsive Instruction

Objective 3:

Increase our capacity to meet the instructional needs of each learner

Strategic Initiatives:

3.1) Implement culturally responsive teaching districtwide
3.2) Ensure all students have access to instruction in science, social studies, the arts, health, and physical education
3.3) Implement a districtwide middle school model

College and Career Readiness

Objective 4:

Increase opportunities for students to envision their future, explore careers and prepare for postsecondary education

Strategic Initiatives:

4.1) Strengthen college and career curriculum, instruction, pathways, and personal planning

Program Evaluation/ Resource Allocation

Objective 5:

Allocate resources based on program effectiveness and organizational priorities

Strategic Initiatives:

5.1) Implement a system for routinely assessing program effectiveness
5.2) Allocate resources strategically through priority-based budgeting
5.3) Align school facilities with well-rounded programs.

Family and Community Engagement

Objective 6:

Improve stakeholder engagement in district decisions

Strategic Initiatives:

6.1) Implement authentic community engagement planning and strategies

Bruce Vento Project Scope



- Merging two St. Paul Public School communities into one
- John A. Johnson School Community + Bruce Vento (BV) School Community combine at existing BV School
- Adding Early Childhood and Wrap Around Services (housing, legal, dental, ECFE, ECSE)
- Existing Elementary School stays in operation during construction
- New School opens in Fall of 2025

Wrap Around Services – Achievement Plus

- Food Pantry
- Clothing Pantry (including diapers)
- Dental Services
- Housing Services
- Legal Services
- Mental Health Services
- Laundry
- Community kitchen

Partnership with:





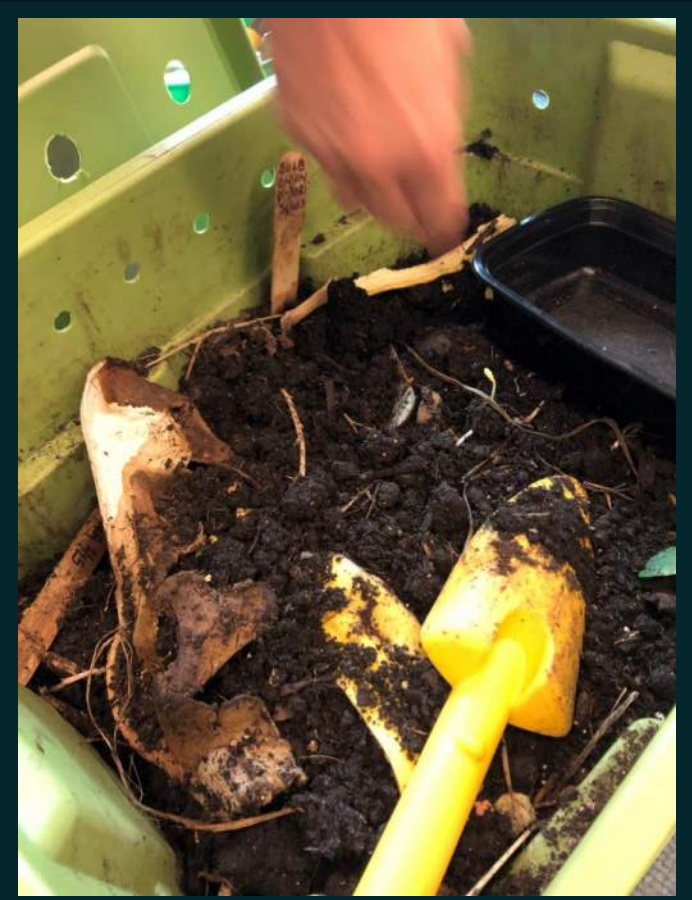


Ms. Sykes
3rd Grade

Ms. Wengard
3rd Grade

UNFI

UNIVERSITY OF
ST. THOMAS

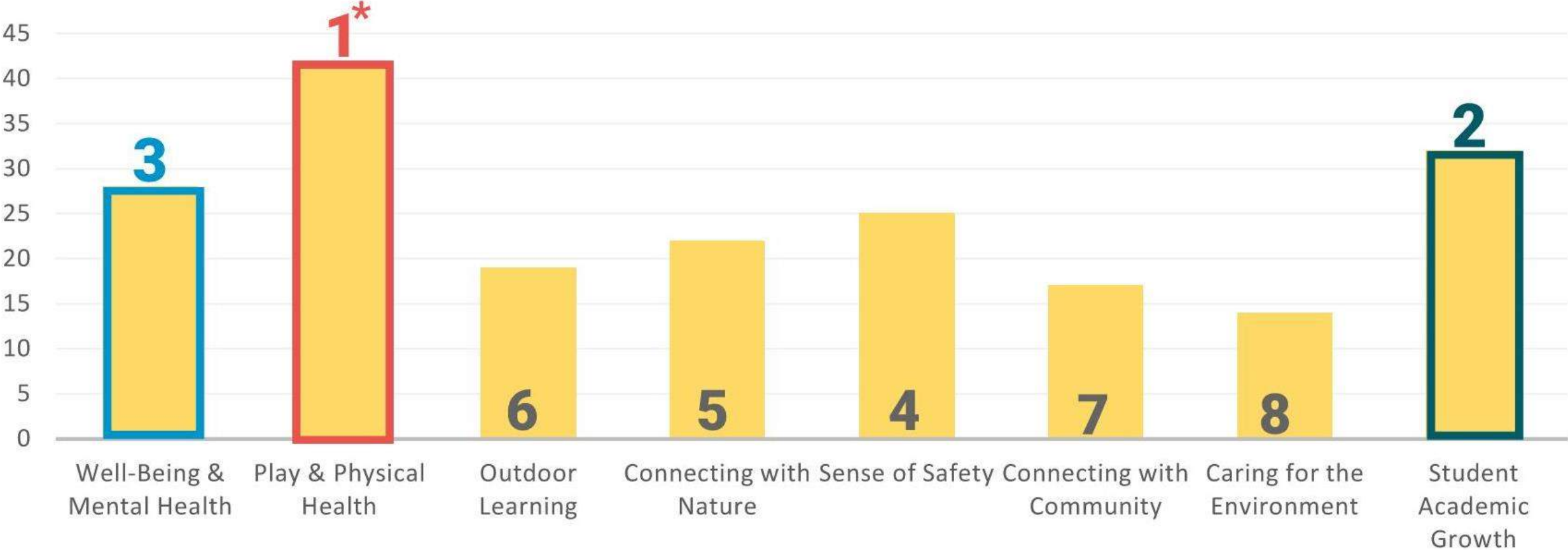




Back to School Night: our first engagement with the new BV Community



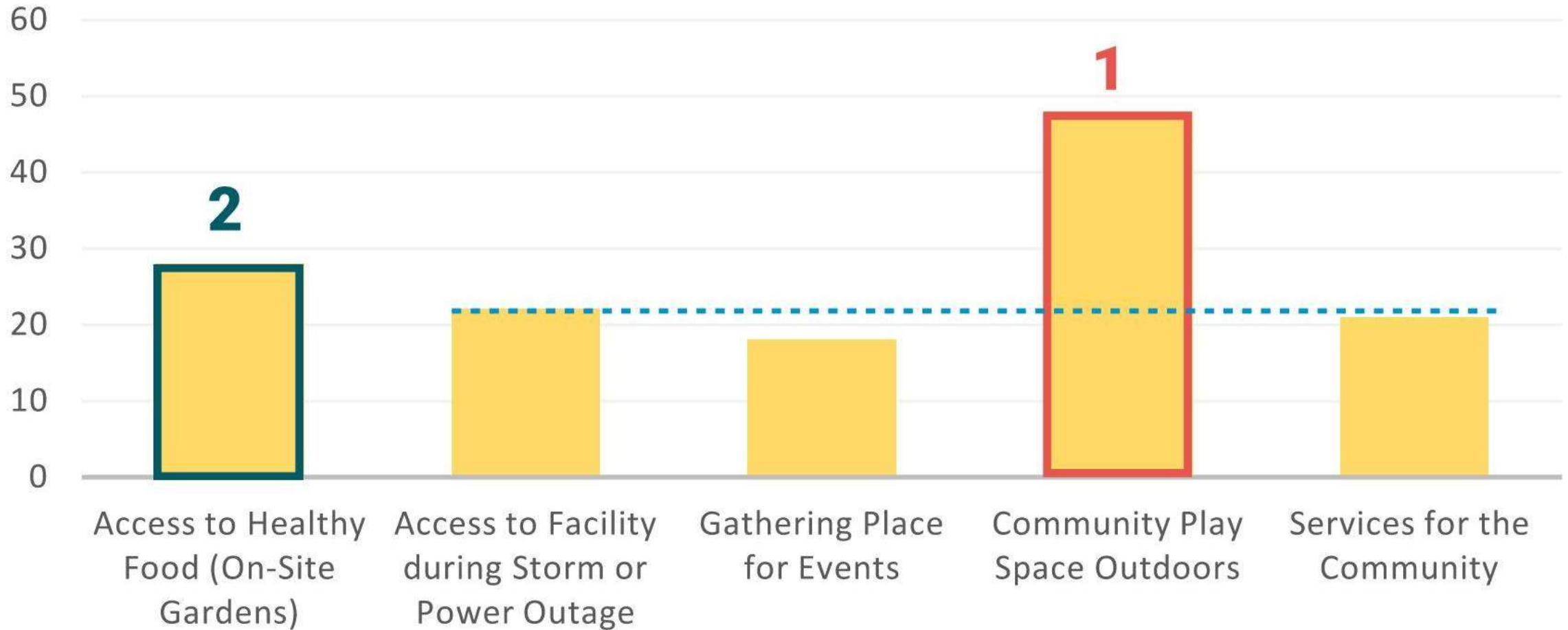
WHICH DESIGN TOPICS SHOULD BE THE HIGHEST PRIORITIES?



Back to School Night: our first engagement with the new BV Community



HOW MIGHT THE NEW SCHOOL BETTER SERVE THE COMMUNITY AS A HUB?



Back to School Night: our first engagement with the new BV Community



Designing the Questions

Community Workshop

WELCOME!

we're on an adventure to design your new school, we need your input

threshold moment: outside chalk exercise



What is special here?

community mapping

Where do I feel I belong?

school mapping

How would you like to see your culture, identity and community celebrated through art and story?

words + images

How can we make school playful?

collage
Make + Take

How would you recommend the district invest in these goals? Select up to 5

dotmocracy

Stress Management

Dignity & Self-Esteem

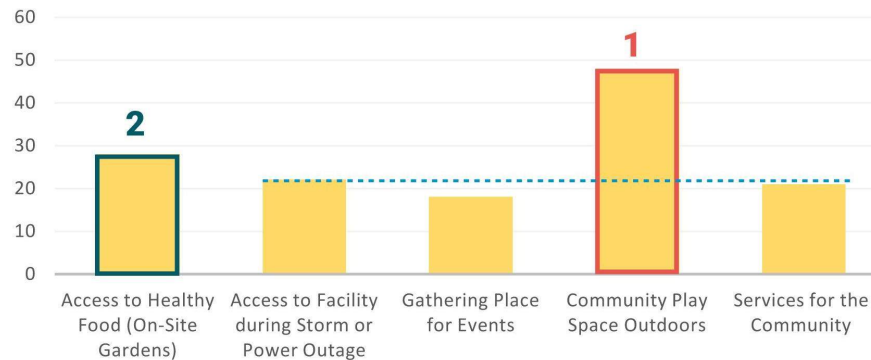
Sense of Community

Safety, Privacy & Personal Space

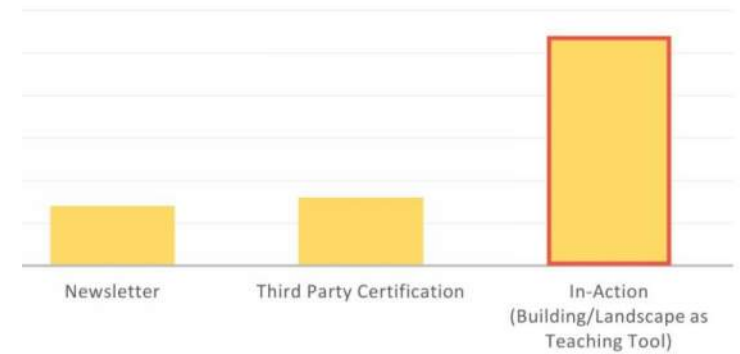
Beauty & Meaning

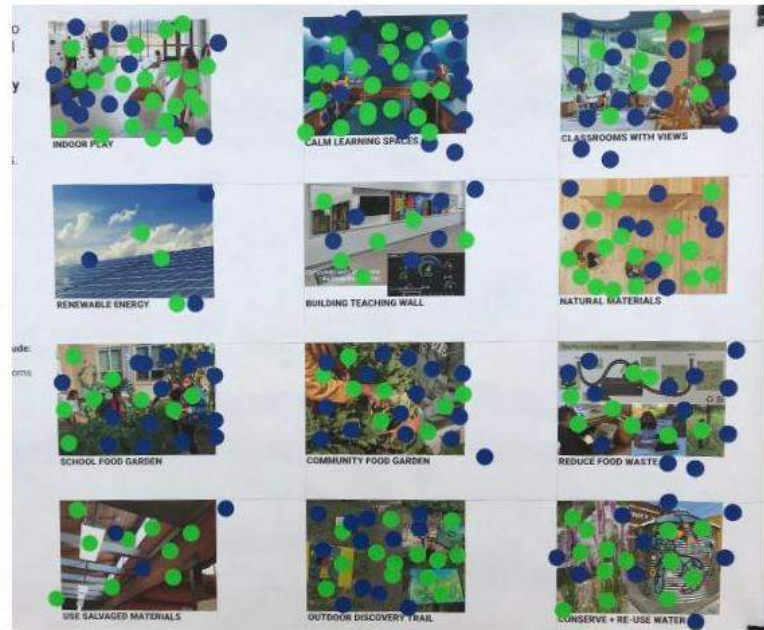
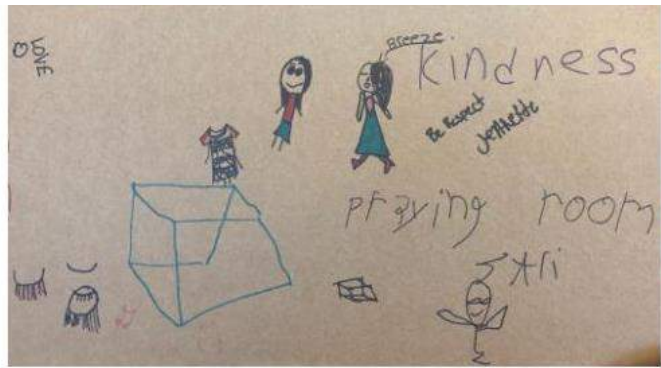
Empowerment & Personal Control

HOW MIGHT THE NEW SCHOOL BETTER SERVE THE COMMUNITY AS A HUB?



HOW SHOULD THESE GOALS SHOW UP IN THE BUILDING OR SITE?





Through the Lens of Trauma Informed Design: Teacher Surveys

▪ Rate your overall satisfaction:

- Outdoor teaching/learning opportunities (*outdoor classrooms, opportunities to engage with the landscape*) ————— **Stress Management**
- Equitable access (*accessibility, access to resources and space*) ————— **Dignity & Self-Esteem**
- Opportunities to collaborate with other teachers and staff (*shared work spaces, shared resources, time to connect*) ————— **Sense of Community**
- Sense of security and control (*clear wayfinding, sightlines, paths of retreat, refuge spaces, inclusive restrooms*) ————— **Safety, Privacy & Personal Space**
- The school celebrates and represents its occupants (*meaningful symbols and patterns, spaces that spark the imagination*) ————— **Beauty & Meaning**
- Opportunities for personalization (*project display space, classroom display, flexible furniture, variety of settings*) ————— **Empowerment & Personal Control**
- Welcoming and Inclusive (*does the building make you feel welcome?*) ————— **Dignity & Self-Esteem**
- Spaces that Support Student Mental Health (*calming rooms, sensory rooms, accessible staff support*) ————— **Stress Management**

Through the Lens of Trauma Informed Design: Student Surveys

1. I can look out the window and see trees and plants at school

3. I enjoy learning at school

2. I feel like I belong at school

4. I'm excited to go to school

Stress Management

Beauty & Meaning

Sense of Community / Dignity & Self-Esteem

Answer the following questions as they relate to the **indoor** spaces at your school

5. There are indoor spaces where I can move and play

6. There are indoor spaces where I can make things

7. There are indoor spaces where I can learn and explore

8. There are indoor spaces where I can feel calm

Answer the following questions as they relate to the **outdoor** spaces at your school

9. There are outdoor spaces where I can move and play

10. There are outdoor spaces where I can make things

11. There are outdoor spaces where I can learn and explore

12. There are outdoor spaces where I can feel calm

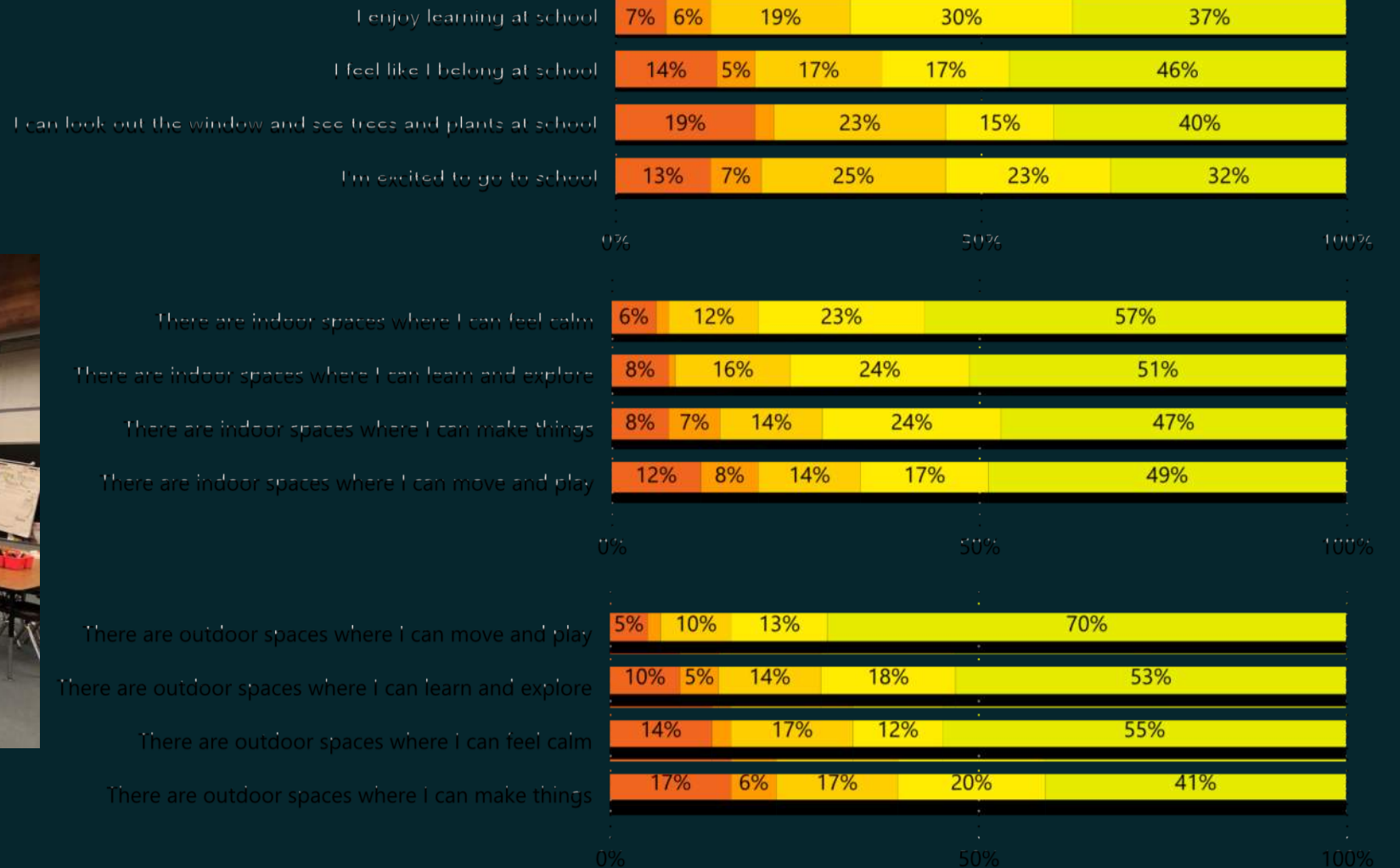
Empowerment & Personal Control

Empowerment & Personal Control

Empowerment & Personal Control

Stress Management

Student Pre-Occupancy Survey



WE SEE...

Bruce Vento Community will **welcome** all learners, staff, families, and community to a **vibrant, unique, and inspiring** environment. Gardens, play spaces, views, art, and natural elements will create a seamless connection between **indoor and outdoor** space. **Inclusive, comfortable, and intentional** spaces create an environment for all to **learn** and **grow** together. **Open** and **bright** areas will be balanced by **calming** zones, creating a place to feel **safe** and **supported**. The environment will be **flexible** and **adaptable** to encourage a wide range of uses and support future needs. Community resources like gardens, kitchens, technology, educational opportunities, and gathering spaces for partners and families will invite everyone to **feel at home**.

Bruce Vento will **celebrate the diversity of our families** and be the **heart of the community**.



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Applications

Potential TID Strategies

SOCIAL SPACES VISIBLE AND ACCESSIBLE FROM MAIN ENTRY

When occupants enter a building and see social interaction happening, there can be a greater sense of belonging and community.

CONVERSATION PIECES

Unique and meaningful design elements or artwork can serve as conversation pieces for occupants to connect and build a sense of community and shared identity.

TAILORED COMMUNITY SPACES

Work with the community to understand what types of activities and events they want to be a part of and design intentional spaces around them.

COLLABORATION SPACE

Provide spaces that encourage group interaction and collaboration. Flexible furniture can be arranged to accommodate a range of group sizes and activities.

CENTRALIZED CHARGING STATION

Locating charging stations in the center of spaces instead of only at the perimeter encourages occupants to mingle and connect to others while using charging devices.

EQUITABLE AND INTERACTIVE TECHNOLOGY

Ensure that all occupants can see what is being presented or shared. This may mean locating supplemental screens around the space for ease of viewing. Interactive technology can allow occupants to engage and collaborate together, even with people not in the room.

EASILY CLEANABLE MATERIALS

Materials that are easy to clean (and easy to tell that they are clean), such as polyurethane fabric, plastic laminate and solid surface, provide peace of mind that dust, and other debris are not hiding.

CLEAR WAYFINDING

Large educational facilities can have complex floorplans that are hard to navigate. Striving for simple layouts and clear hierarchy of space can make a building more navigable and less intimidating.

SCREENED BOUNDARY CONDITIONS

Screened boundaries allow for passive observation and connection between spaces, while filtering distraction from high activity areas. A screened boundary can create the sense of enclosure while avoiding a sense of constriction from smaller enclosed space.

SIGHTLINES FOR PASSIVE OBSERVATION

Use openness and transparency to allow for passive observation rather than relying on an authority figure. This can make the space feel less surveilled while also keeping eyes on the space for safety.

RETREAT SPACES

Provide spaces that allow occupants to retreat from the stresses of the main space and unwind. This may be an enclosed piece of furniture, a built-in nook, or a small focus room.

INCLUSIVE RESTROOM DESIGNS

Inclusive restrooms embrace the ethics of universal design and provide a private space to recover from stress or triggering events. They serve all occupants equally.

OPERABLE WINDOWS

Provides occupants with a sense of control over the airflow, temperature, humidity and sound in the space.

INDOOR SPACES THAT ENCOURAGE MOVEMENT AND PLAY

Create durable, safe and fun places that spark movement and play. Floor patterns, dynamic lighting, and engaging wall graphics may promote a sense of play.

ZONED AND DIMMABLE LIGHTING

Spaces with different lighting zones allow occupants to change how defined areas are lit and dimmable controls give occupants the ability to modify the brightness to match how the space is being used and how people are feeling in the space.

TOUCH DOWN SPACES

Inspiring, engaging spaces for occupants to transition and connect. Recessed benches or flexible furniture may offer this opportunity.

VARIETY OF FURNITURE TYPES AND ZONES

Provide furniture options with varying degrees of tactility, mobility, and posture. Arrange different types of furniture into zones to give occupants choice of where they want to be.

BRING PLANTS INSIDE

Planting, watering and caring for plants can be therapeutic. In climates with an extended winter season, greenhouses and indoor plants can be used to extend these benefits through the winter.

TRANSITION ZONES BETWEEN SPACES

Create natural and gentle experiences of threshold/transition between spaces of different uses, between interior and exterior, and different levels of social activity.

CURVED FURNITURE FORMS

Soft and organic forms in furniture and finishes can make a space feel more comfortable and reduce stress for occupants.

ACOUSTIC SEPARATION / MITIGATION

Use acoustic separation, like fabric covered space dividers and high STC walls, and mitigation, like sound masking, to reduce unnecessary or overwhelming ambient noise.

HEATED FLOORS

Heated floors provide comfort for learners who occupy the floor space during activities and learning. They can also make spaces feel more welcoming.

QUIET SYSTEMS AND LIGHTS

Equipment and lights that create a buzzing, clicking or subtle sound can be distracting and upsetting. Select quiet fixtures and design acoustic separation from noisy building systems.

LIGHTING FOR CIRCADIAN RHYTHMS

Include lighting that changes intensity and color over the course of the day to correspond to people's natural circadian rhythms. A healthy circadian rhythm is associated with improved long-term health and promotes better sleep habits.

WELCOMING ENTRY SEQUENCE

The entry to the space should be well-lit, warm and welcoming. Natural light, comfortable furniture, and clear wayfinding help people feel like they belong.

CAREFUL AND WELL DESIGNED STORAGE

Storage designed to reduce clutter and visual complexity can improve occupant well being, while allowing occupants to feel agency over their spaces and keep them tidy. Well designed storage can double as display to enrich the character of the space.

FURNITURE OPTIONS FOR ALL BODY TYPES

Intermix furniture in a range of sizes and postures, including bariatric and sensory options, allowing occupants to select what feels more supportive and comfortable to them.

ACHIEVEMENT DISPLAY AREA

Design intentional spaces for 2D, 3D, and digital display.

EQUITABLE ACCESSIBILITY

Sloped floors, ramps and elevators which are centrally located and near stairs create a more equitable path of travel for all occupants.

INDIRECT LIGHTING NEAR MIRRORS

Indirect side lighting creates a more attractive lighting condition when looking in the mirror, helping to support self-image.

CULTURALLY RELEVANT DESIGNS

Work with the community to understand the stories that occupants want to see told in the building.

REDUCE VISUAL COMPLEXITY

Irregular, cluttered, and highly contrasting spaces can be confusing and disorienting. Minimize the interior palette to contain only what is necessary to serve the building and tell the story.

NATURE WALKS AND LEARNING TRAILS

Accessible pathways through natural surroundings can support sense of place and teach occupants about the natural ecosystem.

NATURAL AND TEXTURED MATERIALS

Materials like wood, stone, and textured fabric add warmth, authenticity, and softness to the space.

MEANINGFUL COLOR PALETTES

Work with the community to understand what colors are most meaningful and use them to add character to the space.

STORYTELLING AND DISPLAY

Intentional spaces for storytelling and changeable displays infuse the space with identity and meaning.

Dignity & Self-Esteem

CAPTIVE WALL DESIGNED STORAGE

Provide for storage in a visible location in a public area, such as in a hallway, and provide for storage in a private area, such as in a classroom, to support the dignity of students and staff.

FURNITURE AND FIXTURES SIZED TO YOUNGER OCCUPANTS

Accommodate young children and provide furniture and fixtures for younger children and staff to support the dignity of students and staff.

WELCOMING ENTRY SEQUENCE

The public face of the building should be a welcoming and inviting introduction to the building and its purpose. The entry sequence should be designed to support the dignity of students and staff.

Sense of Community

MULTI-LEVEL STAIRS

Provide for multi-level stairs to support the dignity of students and staff.

TIES TO NEIGHBORHOOD COMMUNITY AND CULTURE

Provide for ties to neighborhood community and culture to support the dignity of students and staff.

CONVERSATION PIECES

Provide for conversation pieces to support the dignity of students and staff.

Beauty & Meaning

QUALITY OF WELLNESS DESIGN / DESIGN

Work with the community to understand the user group and their needs to support the dignity of students and staff.

CLUSTERS AND ADJACENT CIRCULATION

Provide for clusters and adjacent circulation to support the dignity of students and staff.

NATURE WALKS AND LEARNING TRAILS

Provide for nature walks and learning trails to support the dignity of students and staff.

Stress Management

ACOUSTIC SEPARATION / MITIGATION

Provide for acoustic separation and mitigation to support the dignity of students and staff.

AVOID HARD MATERIALS AND NOISE SOURCES

Provide for avoidance of hard materials and noise sources to support the dignity of students and staff.

AVOID HARD MATERIALS AND NOISE SOURCES

Provide for avoidance of hard materials and noise sources to support the dignity of students and staff.

EXTERIOR NATURAL LIGHTING

Provide for exterior natural lighting to support the dignity of students and staff.

EXTERIOR ACOUSTIC BARRIERS

Provide for exterior acoustic barriers to support the dignity of students and staff.

SOFT FORMS

Provide for soft forms to support the dignity of students and staff.

Empowerment & Personal Control

MIRRORS IN PLAY / RECREATION AREAS

Provide for mirrors in play and recreation areas to support the dignity of students and staff.

OPERABLE BLINDS

Provide for operable blinds to support the dignity of students and staff.

OPERABLE WINDOWS

Provide for operable windows to support the dignity of students and staff.

Safety, Privacy & Personal Space

INCLUSIVE RESTROOM DESIGN

Provide for inclusive restroom design to support the dignity of students and staff.

DESIGN LAYOUT AND PLANS FOR OCCUPANT PERSONAL SPACE

Provide for design layout and plans for occupant personal space to support the dignity of students and staff.

DYNAMIC FURNITURE

Provide for dynamic furniture to support the dignity of students and staff.

SCREENED BOUNDARY CONDITIONS

Provide for screened boundary conditions to support the dignity of students and staff.

SIGHTLINES FOR PASSIVE OCCUPATION

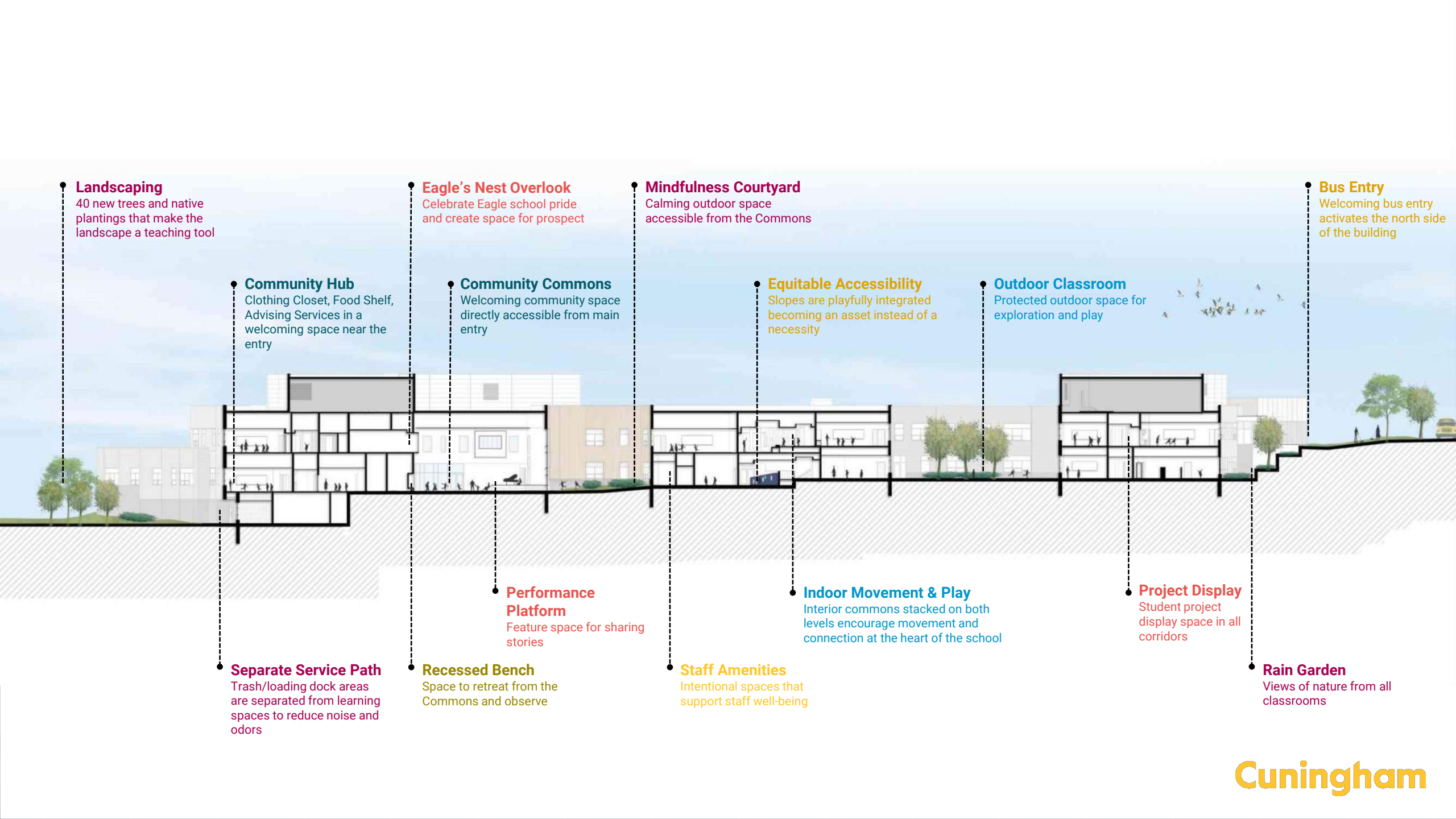
Provide for sightlines for passive occupation to support the dignity of students and staff.

SPACE FOR NAPPING

Provide for space for napping to support the dignity of students and staff.



Cunningham



Landscaping

40 new trees and native plantings that make the landscape a teaching tool

Community Hub

Clothing Closet, Food Shelf, Advising Services in a welcoming space near the entry

Eagle's Nest Overlook

Celebrate Eagle school pride and create space for prospect

Community Commons

Welcoming community space directly accessible from main entry

Mindfulness Courtyard

Calming outdoor space accessible from the Commons

Equitable Accessibility

Slopes are playfully integrated becoming an asset instead of a necessity

Outdoor Classroom

Protected outdoor space for exploration and play

Bus Entry

Welcoming bus entry activates the north side of the building

Separate Service Path

Trash/loading dock areas are separated from learning spaces to reduce noise and odors

Recessed Bench

Space to retreat from the Commons and observe

Performance Platform

Feature space for sharing stories

Staff Amenities

Intentional spaces that support staff well-being

Indoor Movement & Play

Interior commons stacked on both levels encourage movement and connection at the heart of the school

Project Display

Student project display space in all corridors

Rain Garden

Views of nature from all classrooms



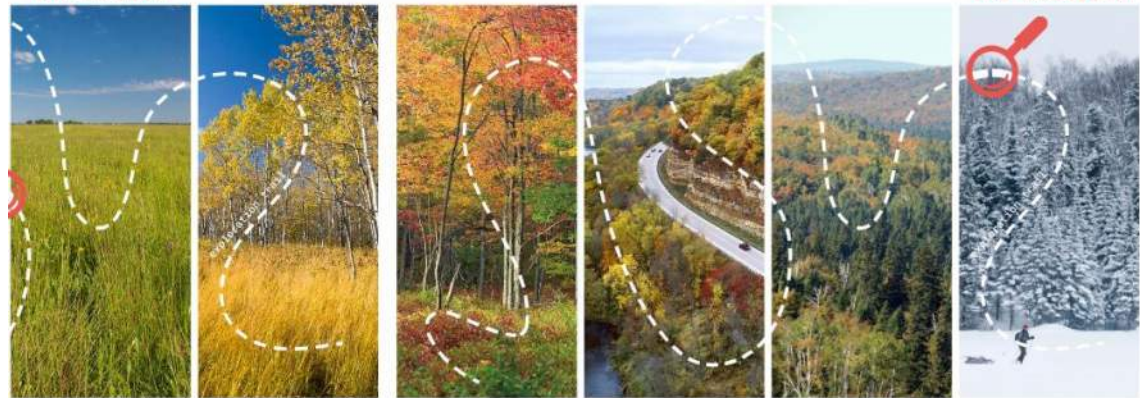
Regen Vision Statement:

The design of the new Bruce Vento School will be rooted in play and nature in order to promote the overall health, well-being and empowerment of students, staff and community.

the creek



the meadow



the woodland



Legend

Interior Spaces

- 1 Lily Pad Creek
- 2 Motor Room
- 3 Early Childhood
- 4 PK
- 5 Commons
- 6 Kindergarten
- 7 Indoor Play
- 8 Community
- 9 Admin

Exterior Spaces

- 1 Playground
- 2 Garden
- 3 Learning Creek
- 4 Outdoor Classroom

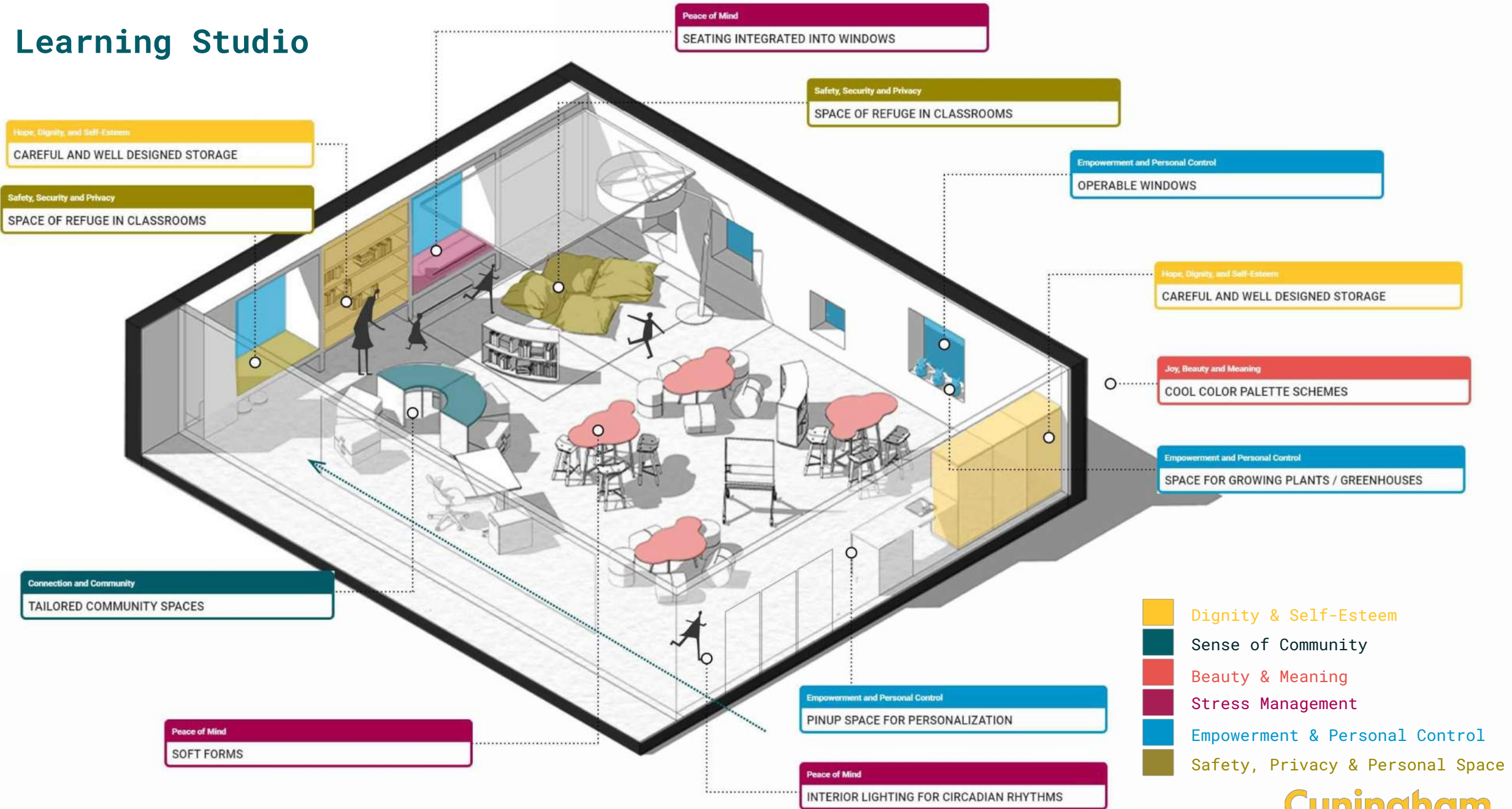




Materiality

How might we design
for all 6 principles in
key spaces?

Learning Studio



Main Entry



Beauty and Meaning
NATURAL LIGHT INTO LEARNING SPACES

Security, Privacy & Personal Space
SPACES FOR "PROSPECT"

Sense of Community
CONVERSATION PIECES

Beauty and Meaning
NATURE WALKS AND LEARNING TRAILS

Stress Management
AUTHENTIC CONSTRUCTION MATERIALS

Sense of Community
COMMUNITY RESOURCES

Empowerment & Personal Control
SPACES THAT ENCOURAGE MOVEMENT AND PLAY

Security, Privacy & Personal Space
SCREENED BOUNDARIES

Security, Privacy & Personal Space
EXTERIOR AWNINGS / SHELTERED SPACES

Security, Privacy & Personal Space
INTENTIONAL SIGHT LINES FROM INTERIOR TO MAIN ENTRY

Sense of Community
DIRECT CONNECTIONS TO THE EXTERIOR

Dignity and Self Esteem
WELCOMING ENTRY SEQUENCE

Stress Management
AUTHENTIC CONSTRUCTION MATERIALS PERIMETER SEATING

Beauty and Meaning
NATIVE LANDSCAPES

Main Entry



Stress Management
NATURAL LIGHTING AND VIEWS

Stress Management
LOW VOC/ODOR MATERIALS AND PRODUCTS

Stress Management
LOWER VOLUME SPACE NEAR HIGH VOLUME ACTIVITY SPACES

Security, Privacy & Personal Space
CLEAR WAYFINDING

Stress Management
RECESSED BENCHES

Beauty and Meaning
NATURAL AND AUTHENTIC MATERIALS

Security, Privacy & Personal Space
EASILY CLEANABLE MATERIALS

Beauty and Meaning
TRANSPARENCY TO SOCIAL SPACES

Beauty and Meaning
3D DISPLAY

Sense of Community
INTERACTIVE CONVERSATION PIECES

Empowerment & Personal Control
SPACES THAT ENCOURAGE MOVEMENT AND PLAY

Dignity and Self Esteem
WELCOMING ENTRY SEQUENCE

Dignity and Self Esteem
EQUITABLE ACCESSIBILITY

Stress Management
TRANSITION ZONES BETWEEN SPACES

Neighborhood Commons



Stress Management
ACOUSTIC SEPARATION / MITIGATION

Security, Privacy & Personal Space
SPACES FOR "PROSPECT"

Beauty and Meaning
TRANSPARENCY BETWEEN SPACES

Dignity and Self Esteem
EQUITABLE ACCESSIBILITY

Beauty and Meaning
WOOD FURNITURE FOR TACTILE AND VISUAL COMFORT

Empowerment & Personal Control
SPACES THAT ENCOURAGE MOVEMENT AND PLAY

Sense of Community
PRIMARY SOCIAL SPACES
VISIBLE AND ACCESSIBLE FROM MAIN ENTRY

Sense of Community
MULTI-LEVEL SPACES

Beauty and Meaning
COOL / SOOTHING COLOR PALETTE

Sense of Community
COLLABORATION SPACE

Beauty and Meaning
NATURAL OR SOFT MATERIALS

Stress Management
SOFT FORMS

Beauty and Meaning
MEANINGFUL DESIGNS AND PATTERNS

“Cunningham took the time to really listen to our school’s community. They developed an impressive, innovative approach to designing not just a state-of-the-art school, but a beautiful place for families and neighbors to gather together.”

Nicole Napierala, Bruce Vento Principal

[https://essentials.edmarket.org/2024/01/
through-the-lens-of-trauma-informed-design/](https://essentials.edmarket.org/2024/01/through-the-lens-of-trauma-informed-design/)

Through the Lens of Trauma-Informed Design

HAILEY WRASMAN, NCIDQ, IIDA, WELL AP, CUNINGHAM | HEIDI NEUMUELLER, AIA, NCARB, LEED AP, CUNINGHAM



Trauma Informed Design
is *just good design*.

Thank you!
Q&A



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