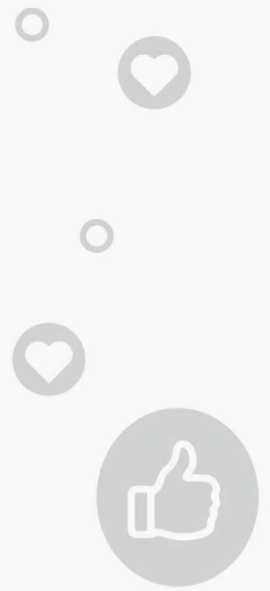




Designing Educational Spaces for

# THE NEXT GENERATION





**1** Understand characteristics of “restorative experience” and benefits of biophilic design strategies pertaining to mental, physical health, wellbeing, and cognitive student performance.

**2** Focus on wellness and educating the whole person.

**3** Case study presentations and post-occupancy video and interviews.

**4** Sharing educator perspective on how Generation Alpha students are unique.



# WHO WE ARE | HORD COPLAN MACHT

**NATIONALLY  
RECOGNIZED  
LEADERS IN  
EDUCATIONAL  
DESIGN**

## Integrated design practice

Architecture  
Landscape Architecture  
Planning  
Interior Design  
Graphic Design  
Sustainable Design

## K12 expertise

**45+** years of K12 experience

**105,000+**  
students educated annually in  
HCM-designed schools

**45+**  
dedicated studio members



ADELE WILLSON

**K12 Studio Lead / Principal | Hord Coplan Macht**

AIA, LEED AP, ALEP





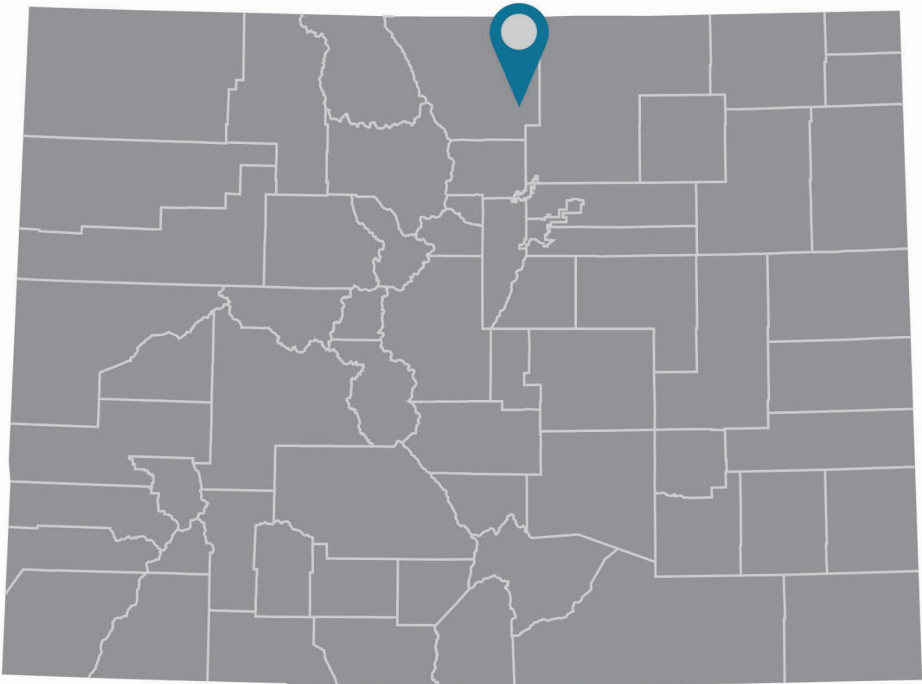
KARA AYLESWORTH

Principal | Hord Coplan Macht

AIA, LEED AP



# WHO WE ARE | BAMFORD ELEMENTARY



(Map of Colorado)

Together we inspire and empower the minds of today to make a difference in the world tomorrow!

## Facts

**77,000** SF

GRADES

**PK-5**

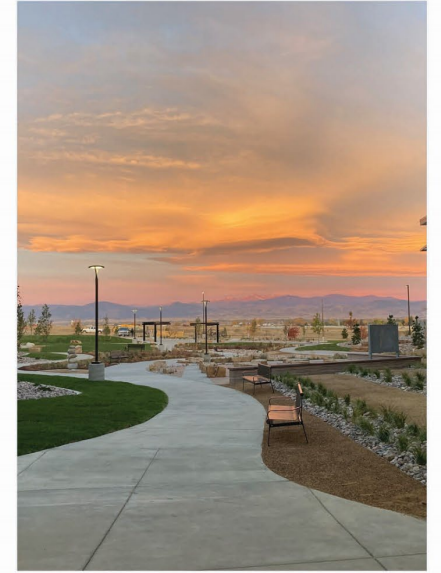
DESIGNED FOR

**700** STUDENTS

LOVELAND, COLORADO



ALISSA PODUSKA  
Principal | Bamford Elementary







# AGENDA

- 01** Understand Generation Alpha qualities
- 02** Focus on wellness
- 03** Educator perspective on how Generation Alpha students
- 04** Case Study
- 05** Q&A



2.8

Million born globally each week



65%

will work in jobs that don't exist today



50%

Half are expected to earn a university degree



66%

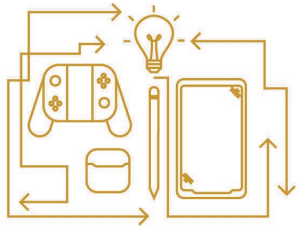
prefer to buy from companies that make a positive difference in the world



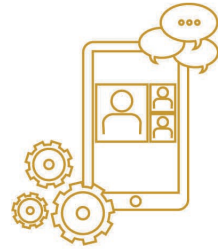


# GENERATION ALPHA

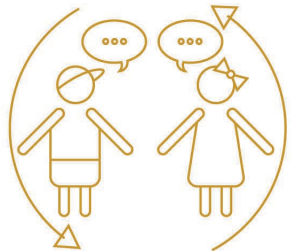
DIGITAL NATIVES BORN AFTER 2010



Technology ingrained as part of their childhoods



Will spend more of their lives online & less in person interaction w/ peers



They will require more intentional efforts to forge person-to-person interaction



Digital experts at a young age & are often advanced learners







# CREATIVE ENTREPRENEURS

Gen Alpha look set to be the 'architects' of a new found tech-enabled creativity.



86%

Enjoy making things.



20%

Already making money from hobbies/talents.



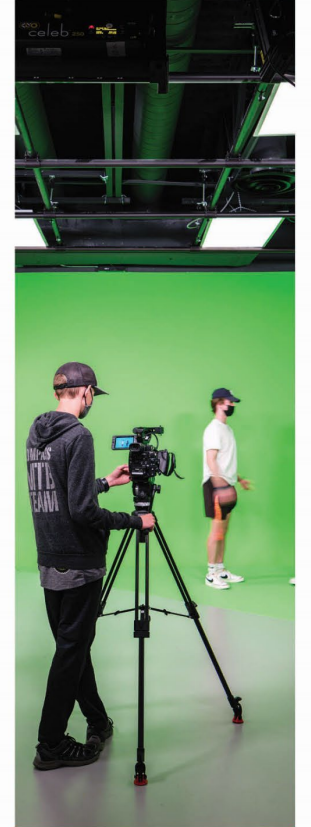
47%

Enjoy tinkering with electronics.



66%

Enjoy creating their own games and/or worlds.



55%

Enjoy creative video making.



# GAMIFICATION



INTERACTIVE +  
ENGAGING

# DIGITAL WORK



TECH SAVVY +  
INNOVATIVE

# KINESTHETIC



HANDS ON +  
EXPERIENTIAL

# PERSONALIZED



FLEXIBLE +  
TARGETED

# APPLICABLE

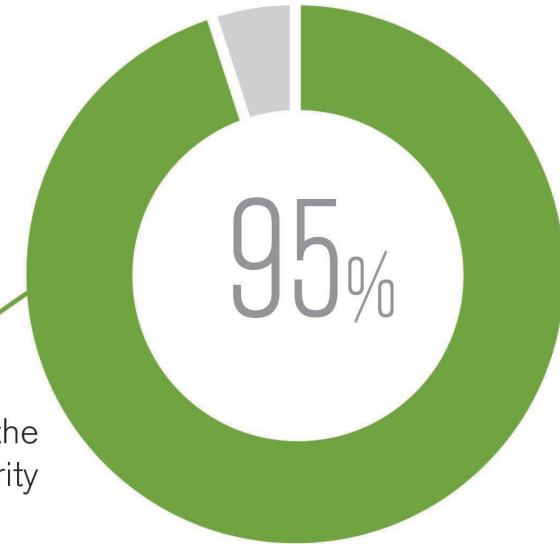


MEANINGFUL +  
RELEVANT





# SOCIALLY CONSCIOUS GENERATION



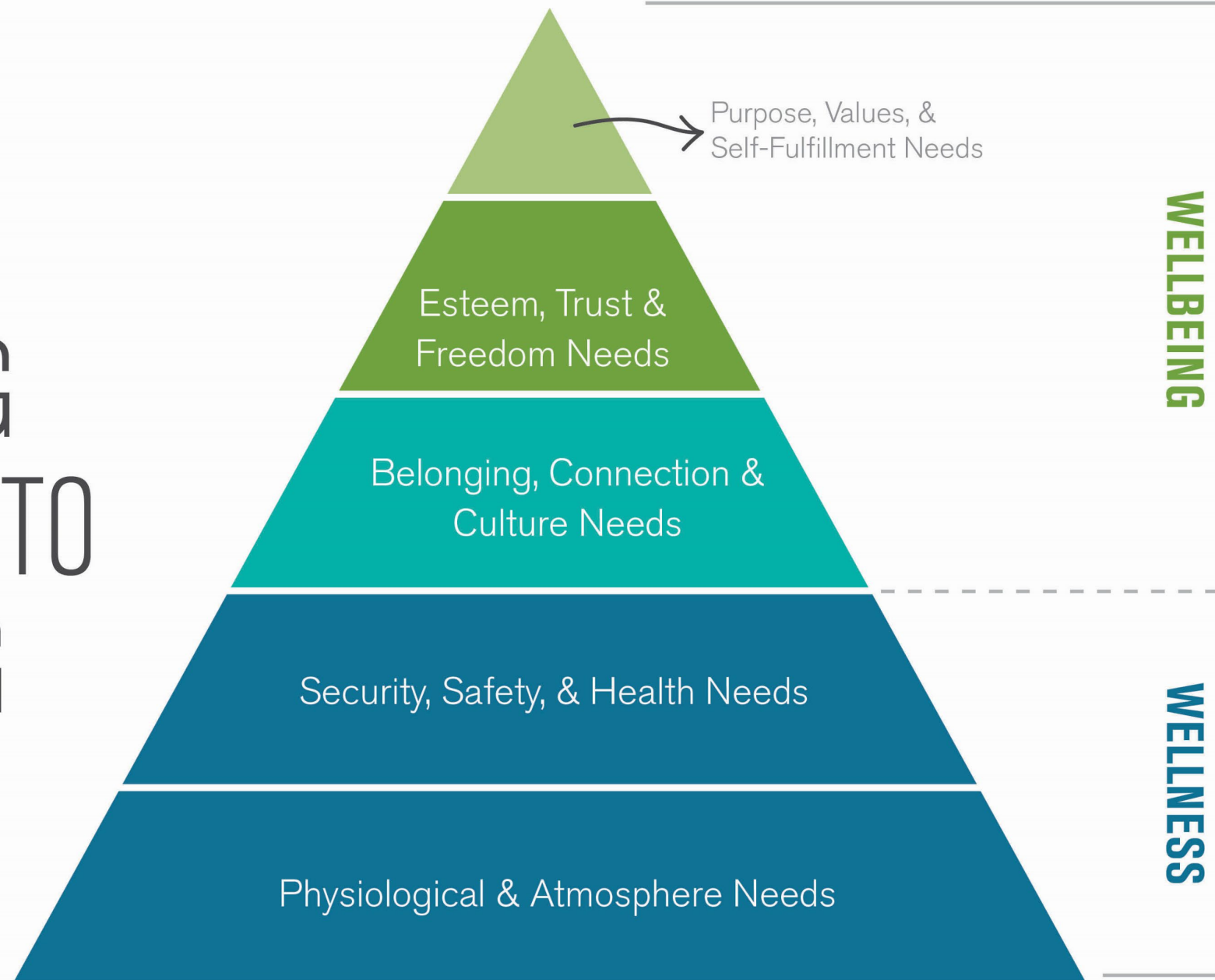
taking care of the environment, a priority

**97%** of this generation places a large emphasis on making sure everyone has enough food to eat





# REFRAMING WELLNESS TO WELLBEING





A photograph of a modern library interior. The space is bright and open, with a high ceiling featuring a decorative arrangement of green and yellow triangular panels. In the foreground, several young children are sitting on colorful, circular beanbag chairs (in shades of green, blue, and yellow), engaged in reading. The middle ground shows rows of low wooden bookshelves filled with books and colorful storage bins. In the background, more children are visible, some sitting on the floor at tables, and a woman is standing near the bookshelves. The overall atmosphere is one of a contemporary, child-friendly learning environment.

# MEETING THE NEEDS OF TODAY'S LEARNERS





mental health resources and overall wellness support will be a key factor as these children age





Need flexible learning environments that can adapt to their rapid progression and a variety of learning styles





Mark the end of the age-old practice of “**QUIET!**” in the classroom and library, balanced with intentional spaces





LITTLE TRAPPERS  
PRESCHOOL

FOCUS ON  
WELLNESS

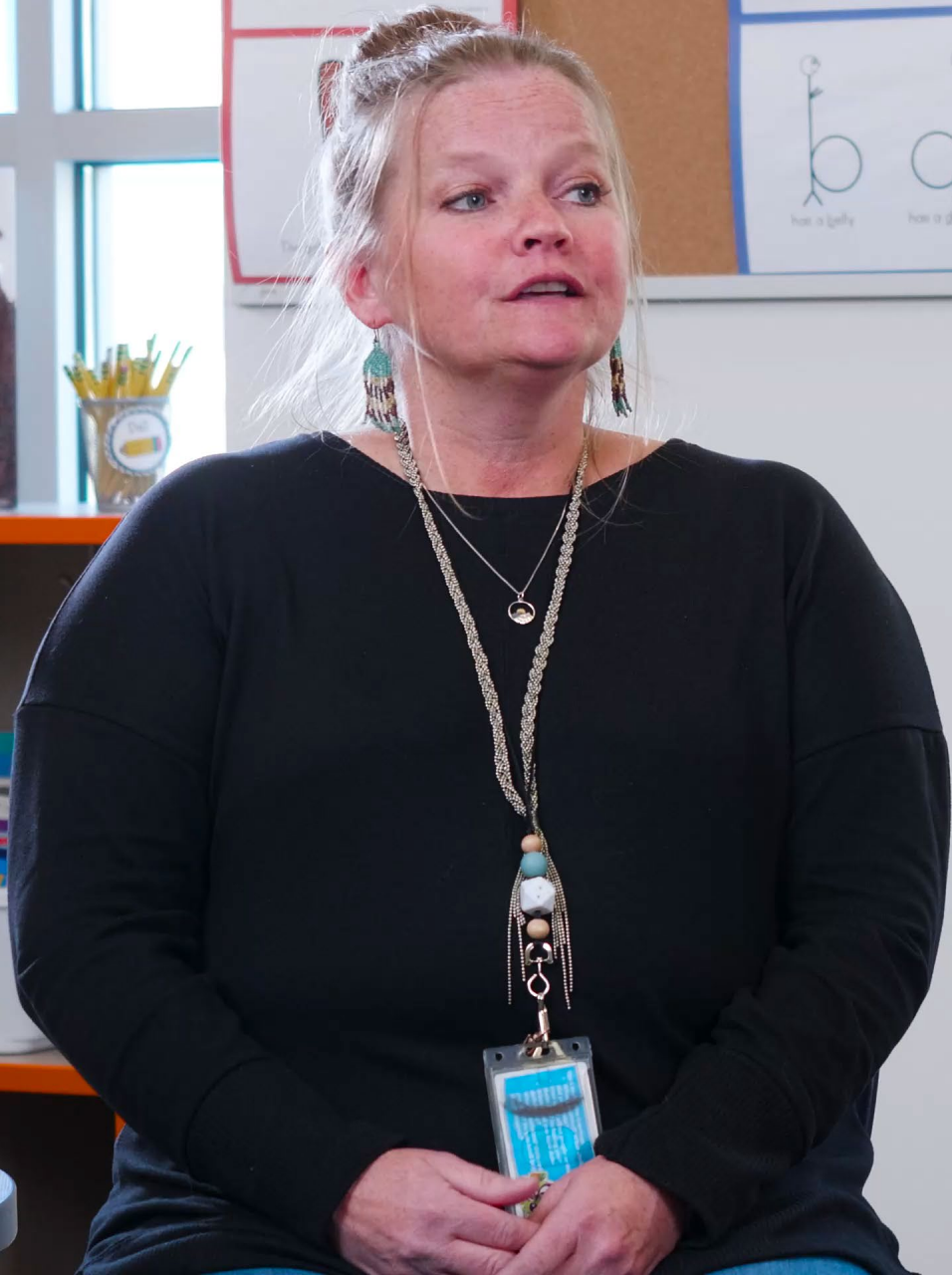
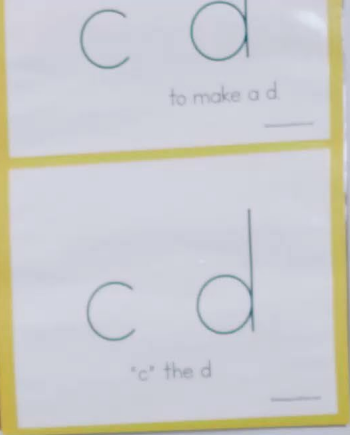
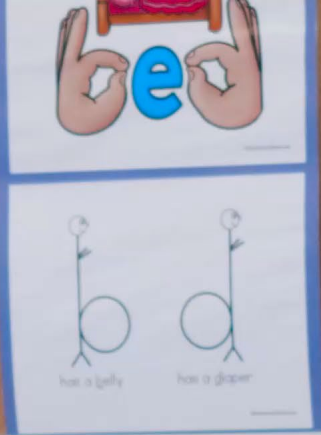




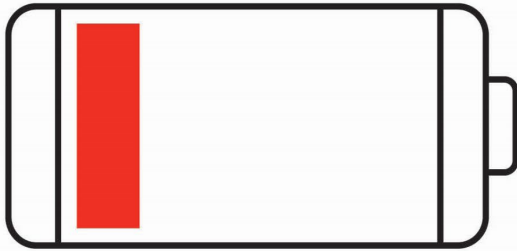
# WELLNESS: EDUCATING THE WHOLE PERSON



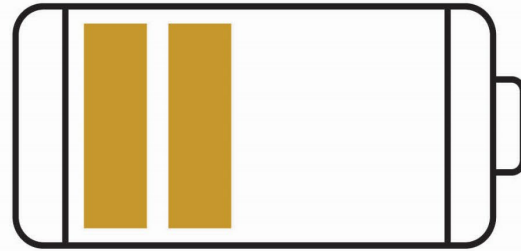




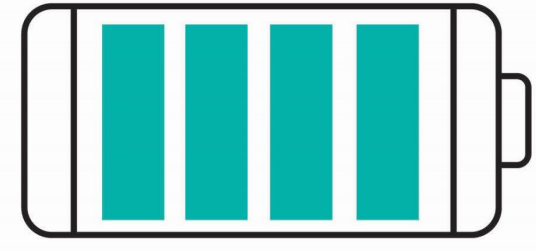
# ATTENTION RESTORATION THEORY



DIRECTED ATTENTION  
FATIGUED



RESTORATIVE  
EXPERIENCE



DIRECTED ATTENTION  
RESTORED



**Natural environments** help in **reducing** constant **demands** of directed attention.



# TOO MUCH STIMULI

background noise

**stress**

Extended periods of  
focused attention  
(tests)

**problem solving**



DIRECTED ATTENTION  
FATIGUED

Poor sleep

**deadlines**

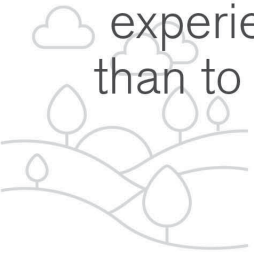
**reading and writing**

hormones



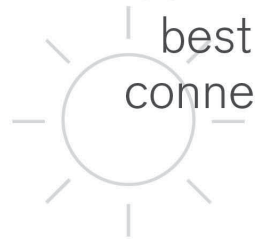
## IMMERSION IN NATURE

What better way to  
experience nature  
than to be in nature



## CONNECTIONS TO NATURE

When students can't  
be in nature, the next  
best thing is visual  
connections to nature



## CONNECTIONS TO NATURAL ELEMENTS

When students don't  
have access to views  
out into nature, bringing  
natural elements inside



## SIMULATED NATURAL ELEMENTS

When we can't bring  
natural elements  
indoors, the next best  
option is simulated  
nature & biomorphic  
patterns





# VISUAL CONNECTION WITH NATURE

- Viewing greenery for **just 40 seconds** was associated with **higher sustained attention**.
- **Exposure to green space** led to **36% more stress reduction** than views to an urban setting.



RESTORATIVE  
EXPERIENCE





# BIOMORPHIC FORMS

- **Exposure to green spaces** (at home and at school) led to **average working memory increase by 22.8%**, **superior working memory by 15.2%**, and **inattentiveness decreased by 18.9%**



RESTORATIVE  
EXPERIENCE





# BENEFITS OF TIME IN NATURE

- Better concentration
- Attention capacity increases
- Self-discipline
- Impulse control
- Emotional resilience
- Behavioral regulation
- Self-esteem



DIRECTED ATTENTION  
RESTORED







## 5 Ways That Biophilic Design Can Boost Social-Emotional Learning

- ① A nature-based color scheme helps students feel calm
- ② Natural light boosts mood and performance
- ③ A biophilic design featuring plants and water lowers stress levels and mental health risks
- ④ Natural shapes and textures promote kinder behavior
- ⑤ Nature imagery and patterns improve attention and memory



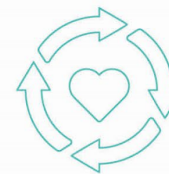


EDUCATOR  
PERSPECTIVE ON HOW  
GENERATION ALPHA  
STUDENTS ARE UNIQUE





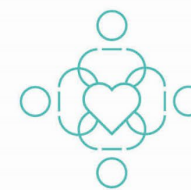
Need to Feel Connected  
-to peers, adults, school, and their community



Social-Emotional Well-Being  
= Importance to Academics



Problem-Finders &  
Solution-Seekers



Educational Opportunities to  
Connect within the Community,  
Work-Force



Philanthropy & Service can  
Impact At-Risk Kiddos  
Changing their trajectory for the positive





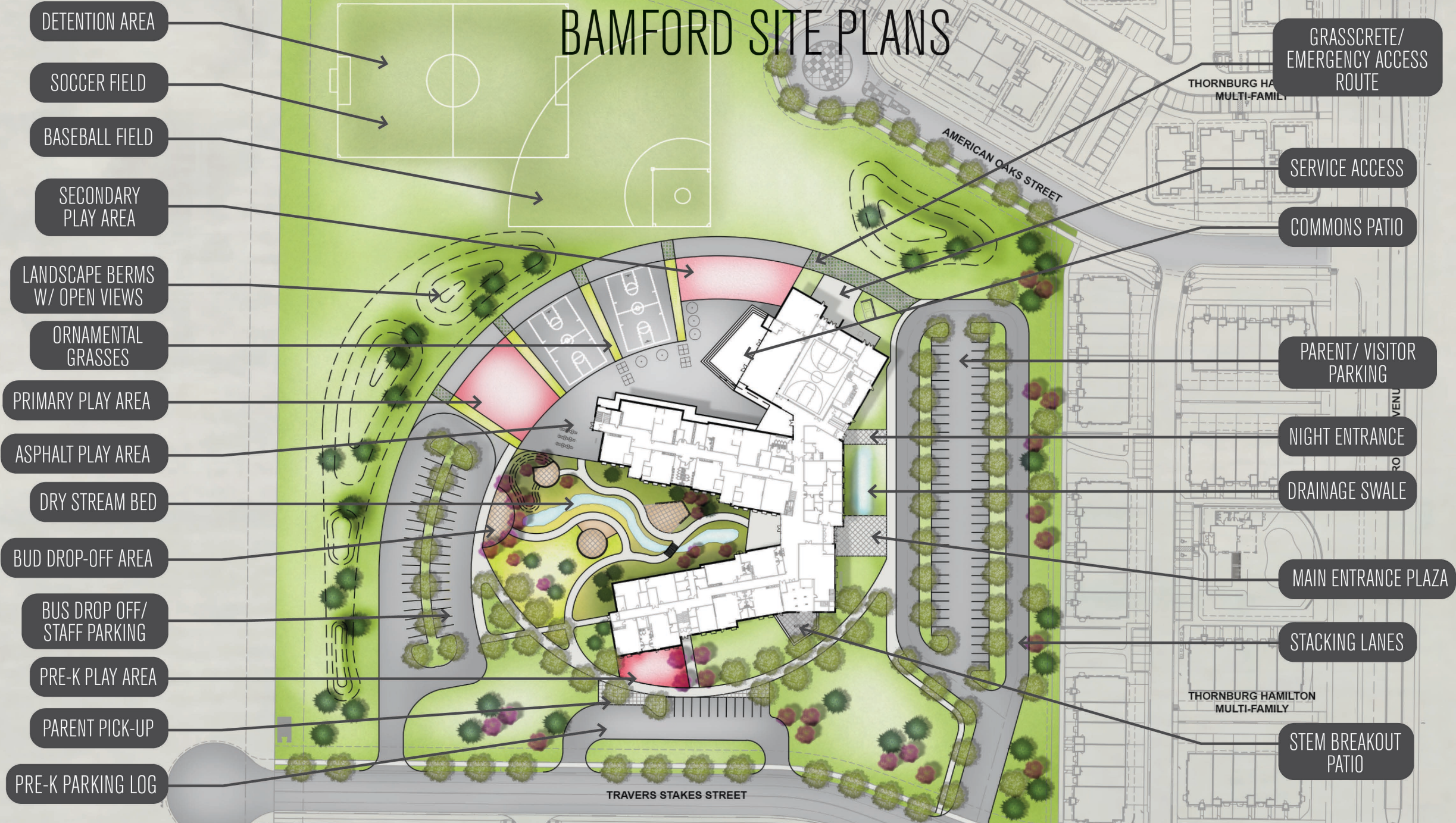


# CASE STUDY





# BAMFORD SITE PLANS



DETENTION AREA

SOCCER FIELD

BASEBALL FIELD

SECONDARY PLAY AREA

LANDSCAPE BERMS W/ OPEN VIEWS

ORNAMENTAL GRASSES

PRIMARY PLAY AREA

ASPHALT PLAY AREA

DRY STREAM BED

BUD DROP-OFF AREA

BUS DROP OFF/ STAFF PARKING

PRE-K PLAY AREA

PARENT PICK-UP

PRE-K PARKING LOG

GRASSCRETE/ EMERGENCY ACCESS ROUTE

SERVICE ACCESS

COMMONS PATIO

PARENT/ VISITOR PARKING

NIGHT ENTRANCE

DRAINAGE SWALE

MAIN ENTRANCE PLAZA

STACKING LANES

STEM BREAKOUT PATIO

THORNBURG HAMILTON MULTI-FAMILY

AMERICAN OAKS STREET

TRAVERS STAKES STREET

THORNBURG HAMILTON MULTI-FAMILY



# BAMFORD FLOOR PLANS

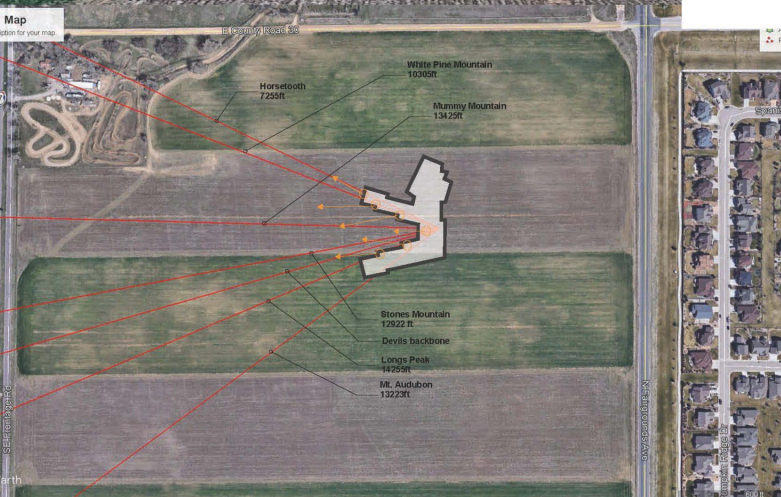
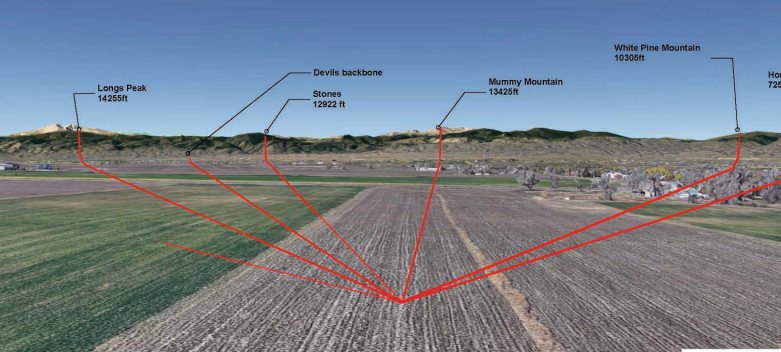


**FIRST FLOOR**



**SECOND FLOOR**





# DESIGNING A COMMUNITY CENTERED ENVIRONMENT

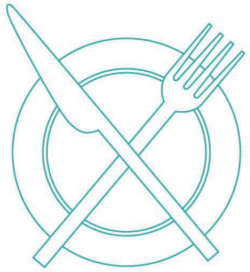
**01** Connections to mountain landscape

**03** Connection to landmarks  
-Horsetooth Mountain  
-Devil's Backbone  
-Windsor Lake  
-Poudre River

**02** Observation of mountains and education of natural landscape of site & beyond

**04** Interior reflects the climate zones of mountains, lush at lower elevations, alpine at higher elevations

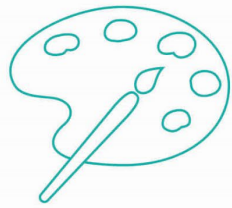




# DINING COMMONS







# ART ROOM



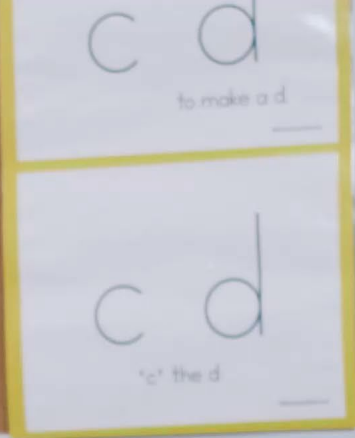
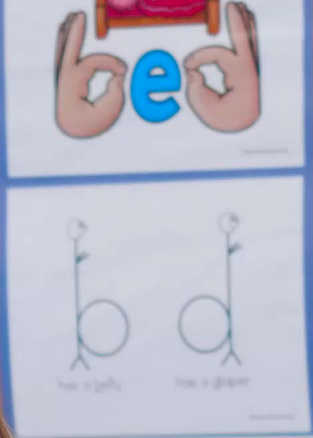




# OUTDOOR CLASSROOM











# LEARNING COMMONS







Big Smelly Bear

B

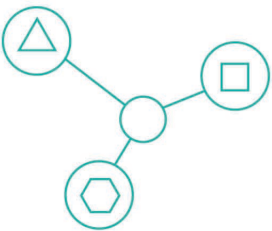
bed

c d  
to make a d

JOHN LITHGOW  
Ruthless  
The Story of the First Lady  
C.E. PAYNE

Curious George

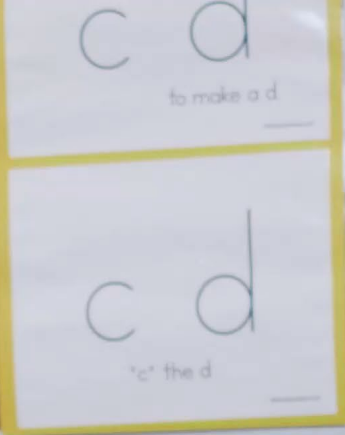
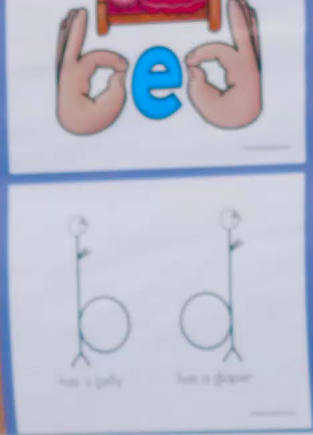




BREAKOUT  
SPACES







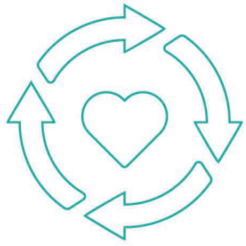




SMALL  
GROUP ROOM



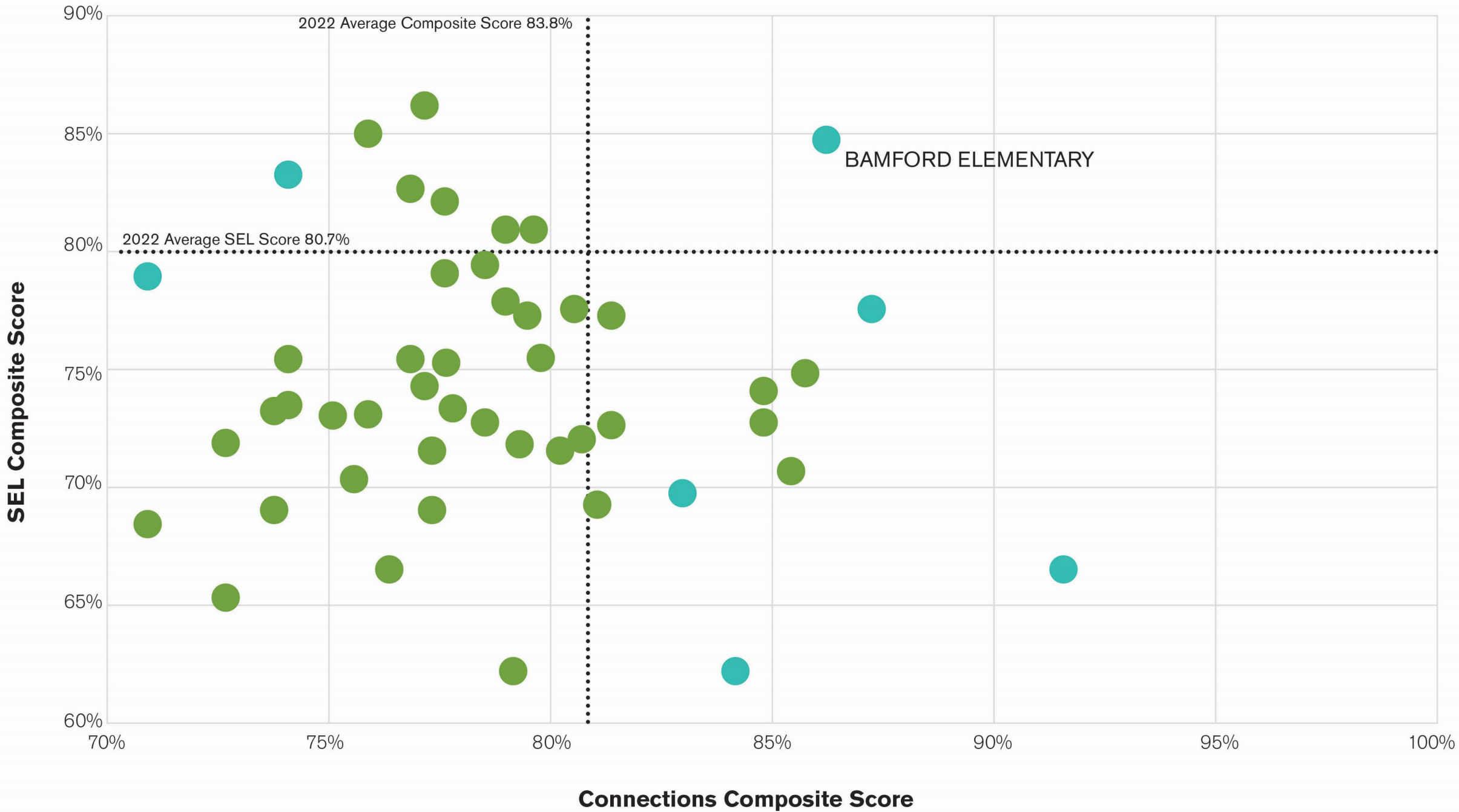




# GYMNASIUM









PACK PANTRY

MAKING A  
DIFFERENCE IN  
THE COMMUNITY









# CONTACT INFORMATION



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970.219.0620



# STATISTIC CITATIONS

“Mental Health of High School Students during the COVID-19 Pandemic”

“New Research Shows How Bad the Pandemic Has Been for Student Mental Health”

“2022 The State of Mental Health in America”

“Mental Health Impact of COVID19 among Children and College Students”

“Impacts of views to school landscapes on recovery from stress and mental fatigue”

“Green spaces and cognitive development in primary schoolchildren”

“40-second green roof views sustain attention: The role of micro-breaks in attention restoration”