VALUES REPORT

School District U-46
EDUCATIONAL FACILITY MASTER PLAN
November 12, 2020

DESIGNING OUR FUTURE

DLR Group

VALUES Workshop Summary

INTRODUCTION

VALUES stands for Viewing Architecture through the Lens of User Experience and Sustainability. This approach focuses on how sustainable design solutions impact the way users interact with and experience their surroundings.

A VALUES session is an important planning and project visioning session used to establish sustainability and wellness goals, while also taking into consideration planning- and project- specific challenges and resources. The process encourages the planning team and stakeholders to identify issues, develop solutions, understand technical and budgetary constraints, and establish the next steps forward. At School District U-46, key stakeholders including teachers, staff, students / alumni, community members, and business partners were invited to a series of two workshops to investigate these topics.

While a VALUES session would normally be conducted in person, the restrictions imposed by COVID-19 led to a virtual facilitation; the U-46 workshops were held via video conference in September 2020.

Over the course of two 2-hour workshops, attendees participated in the following activities, which were framed by a series of educational topics that related to resource conservation, human health, ecology, and social sustainability.

SESSION 1:

Activity 1 - Finding Your Voice

Activity 2 - Imagining Your Future

SESSION 2:

Activity 3 - Prioritizing VALUES

Activity 4 - Defining Success

KEY THEMES

Through the two workshops participants defined their ideal future, identified and prioritized goals for their stakeholder groups, and began establishing key performance indicators (KPIs) to measure progress towards these goals.

Following the workshops, DLR Group synthesized **key goals** for each stakeholder group to propose **methods of measurement**, **targets**, and **design strategies** that would address each goal.

This report summarizes the process taken to identify top goals across stakeholder groups, and the outcomes and next steps for School District U-46 in realizing their sustainability goals.

TIER 1 (Most important)

Environmental Awareness

Community Exchange

Resilience

Sustainable Food Sourcing + Waste

TIER 2 (Very important)

Equity and Diversity

Energy

Building Performance Modeling / Continuous Commissioning

TIER 3 (Important)

Beauty and Inspiration

Comfort / Indoor Environmental Quality

DIY Space and Placemaking

Process

Sustainability Topics

During the VALUES exercise, participants are asked to prioritize a series of cards. These cards cover a variety of sustainability-related topics stemming from multiple rating systems, frameworks, and experiences. The cards can be divided into the themes below:

ENERGY
Generating renewable energy, reducing energy consumption, modeling how a proposed building design will perform in the future, and incorporating innovative building systems to monitor usage.

INDOOR ENVIRONMENTAL QUALITY
The built environment influences occupants' levels of acoustic comfort, air quality, thermal comfort, and visual comfort. High levels of comfort in these areas support occupant health and well-being, cognitive function, and performance.

MATERIALS
Building materials impact human well-being, carbon consumption (both embodied and operational), and cost over the course of their lifetimes; impacts span across production, installation, maintenance, and disposal.

RESILIENCY
Intentional design can support buildings', sites', individuals' and communities' ability to respond to, withstand, and recover from stressful or adverse situations.

SUSTAINABLE SITES
A sustainable site is one that promotes equitable physical access, creates connections to the surrounding neighborhood, and carefully considers site ecology and design.

PROCUREMENT + OPERATIONS
The way a building is operated and maintained, and how the supplies within a building are procured, have an impact on resource use.

WATER
Water encompasses water quality, the hydrology of surrounding water systems, and the way water is managed and consumed on a site.

DESIGN ASPIRATIONS
A building or site's design can provide a source of beauty and inspiration, educate users about issues of sustainability, connect occupants to nature, and create a positive public image.

EXPERIENCE OF A SPACE
Spaces should be flexible, encourage play, allow for placemaking and individual expression, and respond to the different cognitive and physical needs of different activities.

COMMUNITY EXCHANGE
Creating a sense of place, inviting idea exchange, providing public resources and programs, and forging strategic partnerships can help a building or site activate its surrounding community.

SOCIAL SUSTAINABILITY
A building or site's design can celebrate the diverse backgrounds of its users, support equitable access to programs and resources, and positively influence user behavior.

Process
Stakeholders

When determining the sustainability and wellness goals of a school district, it is important to consider the needs, goals, and challenges of all stakeholders. Attendees of the VALUES workshop included a broad cross-section of perspectives from the following groups:

STUDENTS + ALUMNI
Individuals who either attended or recently graduated from U-46 schools. All alumni invited had participated in sustainability-related programs while in U-46 schools.

TEACHERS
Individuals who currently teach at U-46 schools. Invitees included elementary, middle, and high school teachers.

BUSINESS OPERATIONS
Administrative staff and facilities and maintenance staff who serve U-46 schools.

BUSINESS + COMMUNITY PARTNERS
Local organizations, government entities, and groups who may engage with or be impacted by U-46 schools. Invitees included elected officials and community members.

Activity 1

Finding Your Voice

Participants were split out into small stakeholder groups to discuss their group's needs; goals and aspirations; and challenges and pain points. Participants then reconvened to share their perspectives with each other.

What are your group's big-picture challenges, needs, goals, and aspirations related to sustainability and user experience in the U-46 school district?

CAREER PATHWAYS
Sustainable interventions can create opportunities for career pathways and problem-based learning. Elementary school science is essential in establishing a foundation.

STUDENT VOICES
Students want to be involved in the decision-making process surrounding sustainability issues and the Master Plan.

WASTE
School District U-46 needs to establish a more comprehensive recycling, compost, and waste system.

INDOOR ENVIRONMENTAL QUALITY
Practices, infrastructure, and protocols that support a healthier indoor environment will be essential for U-46 students.

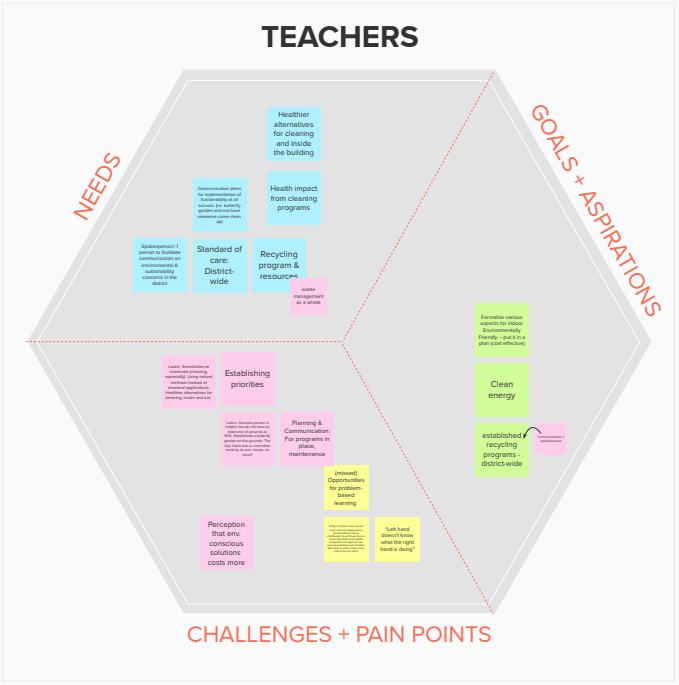
COMMUNICATION
There is a need for improved communication surrounding sustainability practices and protocols across the district.

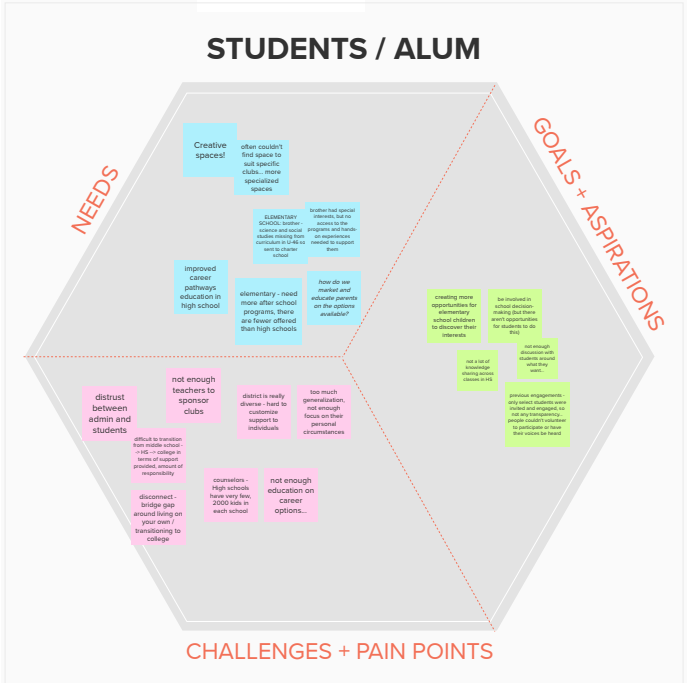
FURNITURE
There is a need to update furniture across district's classrooms – what is the furniture of the future? How can the district make smart, long-term investments?

RENEWABLE ENERGY
Implement renewable energy sources and purchase electric vehicles for the district's fleet.

Activity 1

What are your needs, goals, challenges?





See Appendix for detailed views of exercise.

Activity 2

Imagining Your Future

Participants were asked to imagine a future in which School District U-46 had accomplished its sustainability aspirations. Stakeholder representatives mixed across smaller groups to create a "headline" for the district, along with supporting stories and imagery, that describe the ideal future.

Think 10 years into the future. If the U-46 master plan succeeds in accomplishing its goals, what does that future look like?

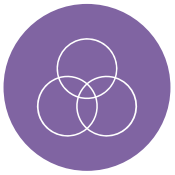
STUDENT ADVOCACY
Students are empowered to become advocates for sustainability and global change. This arises from consistent science education, and the integration of sustainability into other subject areas.

AGRICULTURE AND COMMUNITY
U-46 schools create education pathways around nutrition and agriculture, support community health, and create a farm-to-table system for that serves both school cafeterias and the community.

NET ZERO
Net zero energy and net zero waste are achieved throughout the district. Net zero waste is supported through a composting program that feeds into community gardens.

COLLABORATIVE DECISION-MAKING
Students and teachers collaborate to develop learning paths and make sustainability decisions.

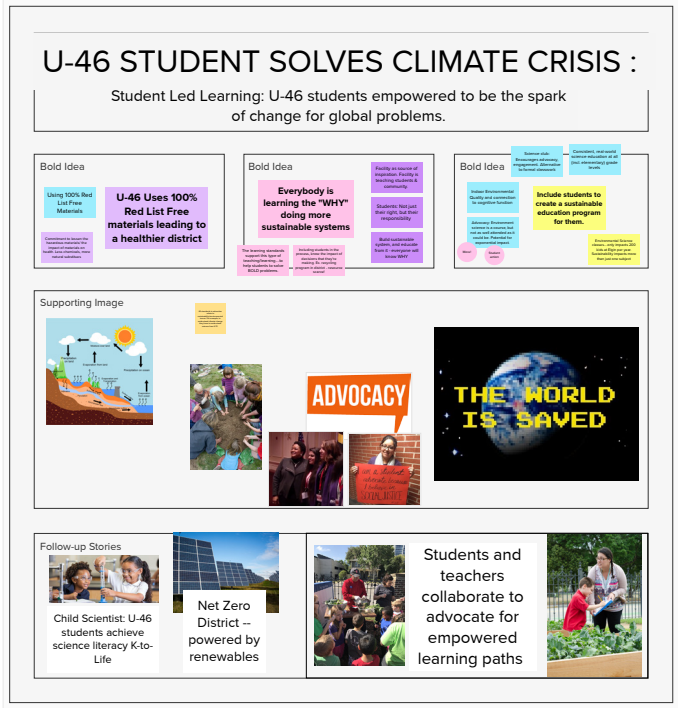
CAREER PATHWAYS
Students gain professional experience and training in sustainability-related fields such as renewable energy, electric vehicle repair, and forestry.

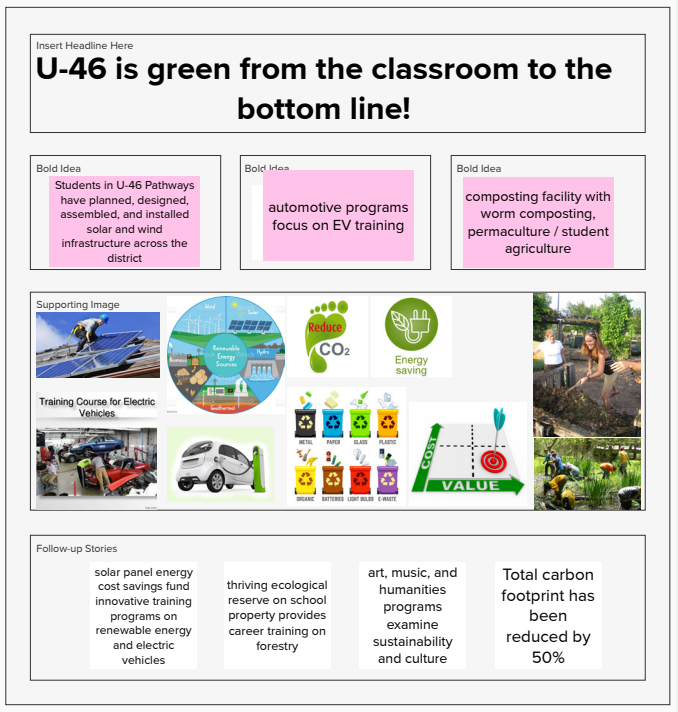


EQUITY
Schools provide outdoor learning opportunities to students across all ages and backgrounds.

Activity 2

What's the headline in 2030?





See Appendix for detailed views of exercise.

Activity 3
Prioritizing Values

Following education about the topics included in the VALUES deck, participants were asked to look through and prioritize a set of 46 sustainability-related topics that fell into 11 key themes. The groups used a survey tool to discuss and narrow down the cards most important to their stakeholder groups. Their process followed the steps below:

1. Education - learn about topics
2. Identify topics of interest
3. Narrow down most important topics
4. Rank topics in order of priority

Which sustainability-related topics would best support your user group's needs and goals?

STUDENTS + ALUMNI

1. Waste
2. Environmental Awareness
3. Emotional Resilience
4. DIY Space & Placemaking
5. Community Activation / Access
6. Behavior Modification

TEACHERS

1. Environmental Awareness
2. Community Activation / Access
3. Emotional Resilience
4. Air Quality
5. Sustainable Food Sourcing
6. Visual Comfort

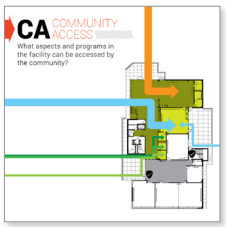
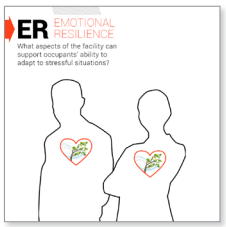
BUSINESS OPERATIONS

1. Energy
2. Building Performance Monitoring
3. Tapping the Experts
4. Equity
5. Environmental Awareness
6. Community Activation / Access

BUSINESS + COMMUNITY PARTNERS

1. Community Activation / Access
2. Diversity
3. Equity
4. Environmental Awareness
5. Building Performance Monitoring
6. Beauty & Inspiration

Activity 2: Chosen Cards

	students + alumni	teachers	business operations	business + community partners
1				
2				
3				
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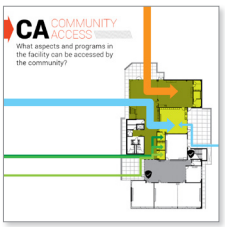
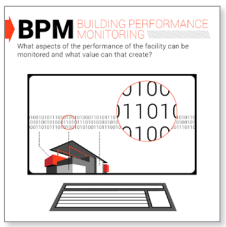
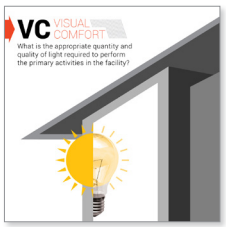
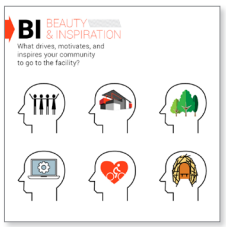
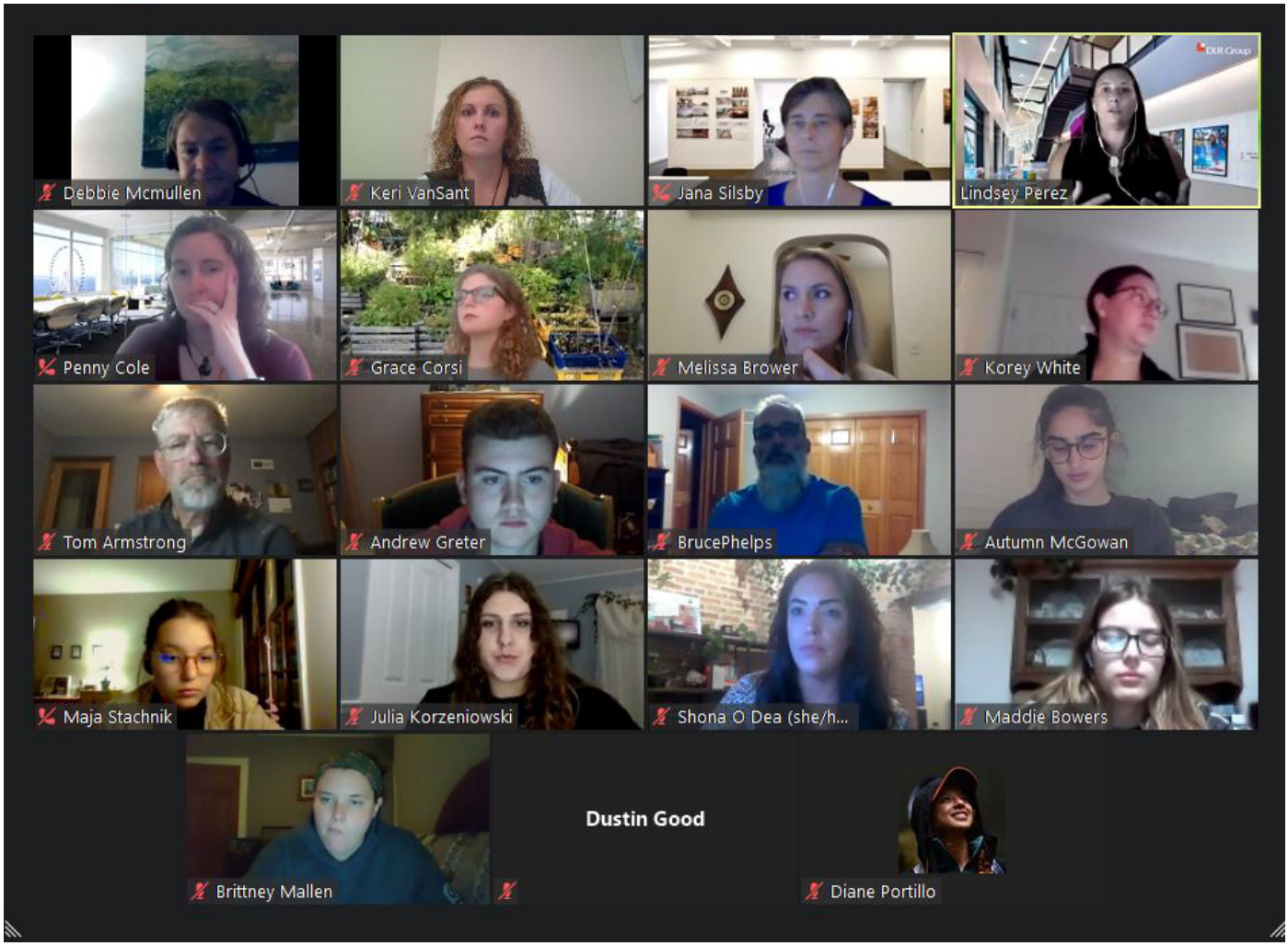
5				
6				

Activity 4

Defining Success

After stakeholder groups selected their top priorities, they explored what success would look like if each topic was achieved. Participants considered what they would see, feel, and measure for each of their top 6 cards, with every group investigating the common themes of Environmental Awareness and Community Exchange.

If success was achieved in the goals you selected, what would you see, feel, and measure?



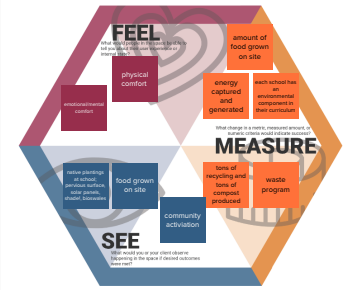
Participants shared out reflections after the exercise.

Activity 4

What would you see, feel, measure?

BUSINESS + COMMUNITY PARTNERS

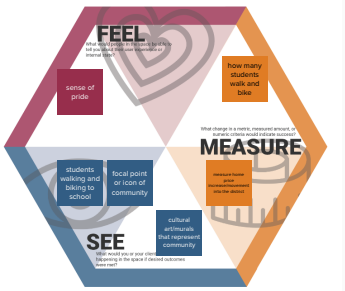
main value 1



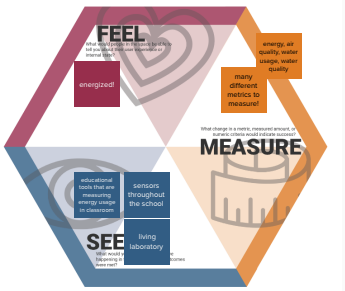
main value 2

main value 3

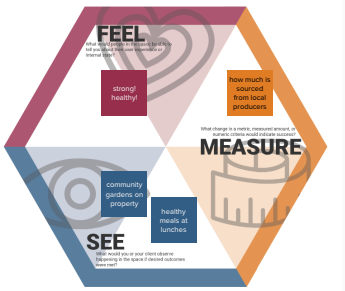
main value 4

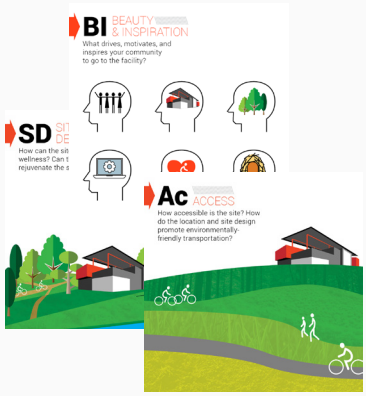


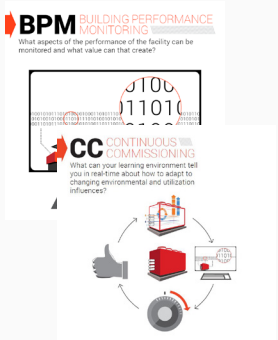
main value 5



main value 6







One of the four stakeholder groups' results from the See Feel Measure exercise.
See Appendix for detailed views of exercise.

Synthesizing Results

Following the workshops, DLR Group reviewed the survey results, comments, and Mural board from the *Prioritizing VALUES* and *See Measure Feel* exercises.

While stakeholder groups chose different cards or interpreted cards in different ways, they often expressed similar goals and values about the future of U-46 schools. Using the comments collected throughout the prioritization exercise, DLR Group combined cards across groups into common themes.

The following pages outline each priority, the cards chosen within it, and the goals that support it.

PRIORITIES
A shared set of values around the future of U-46 schools

GOALS
The specific outcomes desired to realize a priority

Tier 1 Priorities

chosen by 3 or more groups as within top 6 VALUES

ENVIRONMENTAL AWARENESS

Through both curriculum and the built environment, U-46 schools can build a foundation of environmental knowledge and spur collective action across all sustainability systems.

COMMUNITY EXCHANGE

U-46 schools should provide community resources and facilitate community connections, partnerships, and belonging.

RESILIENCE

Through both design and programs, U-46 schools should support students' and communities' ability to cope with stress and unpredictable events.

SUSTAINABLE FOOD SOURCING + WASTE

Sustainable food sourcing will improve student nutrition, reduce waste, and help establish an improved waste diversion system.

Tier 2 Priorities

chosen by 2 groups as within top 6 VALUES

EQUITY + DIVERSITY

To create vibrant and connected communities, U-46 schools must equitably celebrate, represent, and provide resources to the diverse cultures and communities it serves.

ENERGY

Implementing renewable energy infrastructure like solar panels in U-46 schools will reduce the district's carbon footprint, catalyze energy-related community partnerships, and provide a teaching tool for incorporating energy into the curriculum.

BUILDING PERFORMANCE

Continually monitoring building performance can encourage carbon emissions reduction, improve operations, and provide teaching tools for students on how buildings operate.

Tier 1 Priorities

Environmental Awareness

DESCRIPTION

Education is central to promoting environmental awareness. Through both curriculum and the built environment, U-46 schools can build knowledge around science, the environment, and sustainability issues. As students and community members understand how their behaviors impact the environment, they will be empowered to develop solutions and hold each other accountable. Actions will be reflected in other sustainability systems such as sustainable food sourcing, stormwater infrastructure, waste, and clean energy.

GOALS

- Foster a sense of shared responsibility / accountability for environmental impacts of individual decisions (amongst students, teachers, community)
- Require an environment / sustainability focused component to every school's curriculum
- Create an in-depth science curriculum at the elementary school level to raise awareness of environmental processes
- Create partnerships between schools and knowledge experts to increase student knowledge of and involvement in sustainable industries

Tier 1 Priorities

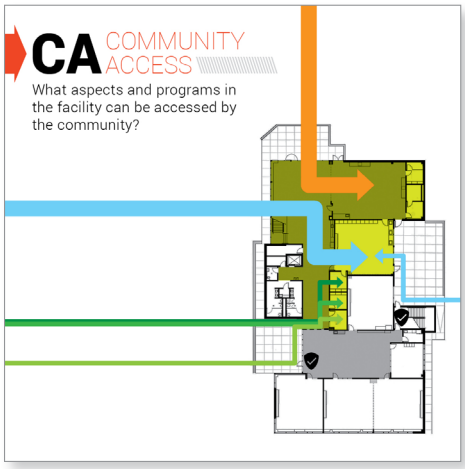
Community Exchange

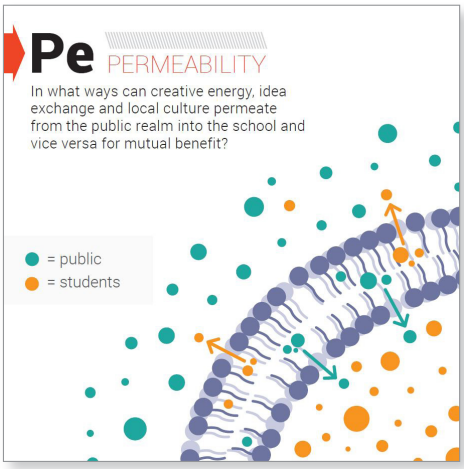
DESCRIPTION

U-46 schools should serve as a conduit to facilitate community connections, partnerships, and belonging. Strong partnerships benefit everyone; communities can participate in U-46 programs like community gardens, and students can engage in career pathways with local organizations / businesses. Beyond educational programs, schools can become community centers that provide resources, services, and programs.

GOALS

- Create more professional partnerships and opportunities for career pathways
- Use schools to provide neighborhood / community resources and benefits
- Encourage student involvement in communities and community connection with schools
- Equitably and transparently engage communities in school communications, activities, and events





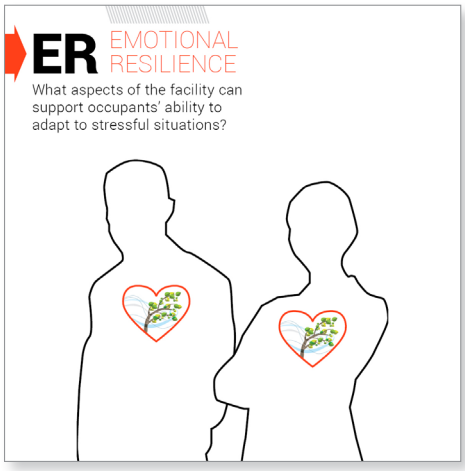
Tier 1 Priorities
Resilience

DESCRIPTION

U-46 schools should support students' and communities' ability to cope with stress and unpredictable events. This will be reflected in both programs and the built environment. To support emotional resiliency, students need consistent access to social services, daylight, biophilic design, and places to decompress. Schools can create community resiliency by providing community resources like food, health services, and internet access in times of crisis. By facilitating strong connections between the community and schools, U-46 can help build resilient social networks of community support.

GOALS

- Use schools to provide the community with essential resources and services in times of crisis (e.g. internet access, hospital beds, meals)
- Provide students with the resources needed to reduce stress, maintain emotional well-being, and promote recovery (e.g. social services, biophilic design, wellness spaces)



Tier 1 Priorities

Sustainable Food Sourcing / Waste

DESCRIPTION

Sustainable food sourcing will improve the nutrition of school-provided food, and support student agency in choosing healthier food options. Sustainable food sourcing could drive the creation of a better waste diversion program that focuses on food waste and recycling, and would reduce waste generation across the district as packaged foods are eliminated. Infrastructure created through sustainable food sourcing, such as community gardens and farm-to-table programs, would become a community resource.

GOALS

- Decrease amount of waste generated in schools
- Improve recycling and compost programs to divert waste from landfills
- Increase student and teacher awareness, accountability, and participation in waste diversion
- Create community gardens and farm-to-table programs that benefit both students and the community

Tier 2 Priorities

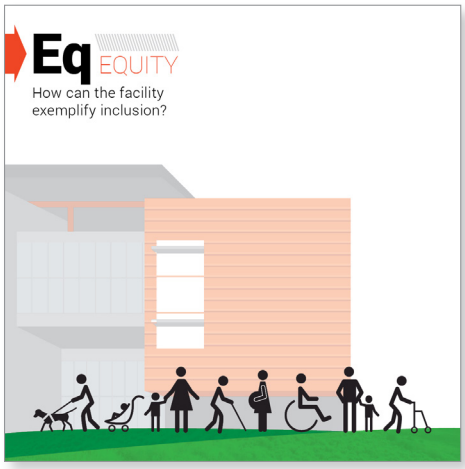
Equity + Diversity

DESCRIPTION

It's vital that U-46 schools reflect and celebrate the unique cultures of their communities. Communities should have equitable access to resources, and should see cultural representation in the physical school environment, engagements, programs, teachers, and staff. Through equitable cultural representation, schools can create neighborhood vibrancy and bridge divides.

GOALS

- Ensure equitable cultural representation of communities in physical design of schools
- Ensure that diverse perspectives are equitably represented in staff, faculty, services provided to students and community
- Involve diverse and varied outside perspectives in curriculum and programs
- Provide equitable and accessible engagement to all communities



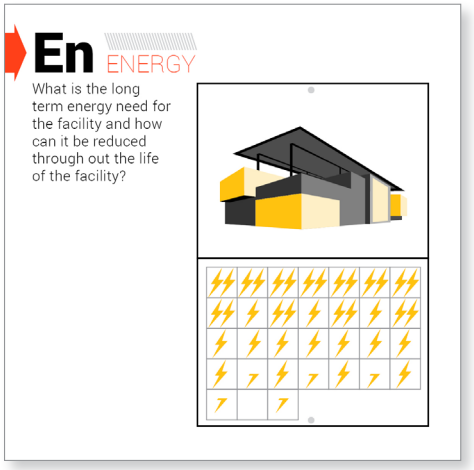
Tier 2 Priorities
Energy

DESCRIPTION

To reduce energy consumption and save costs, the district should install renewable energy infrastructure such as solar panels. Renewable energy infrastructure can be incorporated into the curriculum, allowing students to participate in energy systems. U-46 schools can create partnerships to encourage homeowner and community buy-in around solar infrastructure.

GOALS

- Reduce the district's energy consumption through the installation of renewable energy infrastructure (especially solar panels)
- Incorporate renewable energy into the curriculum
- Encourage community partnerships and participation surrounding energy

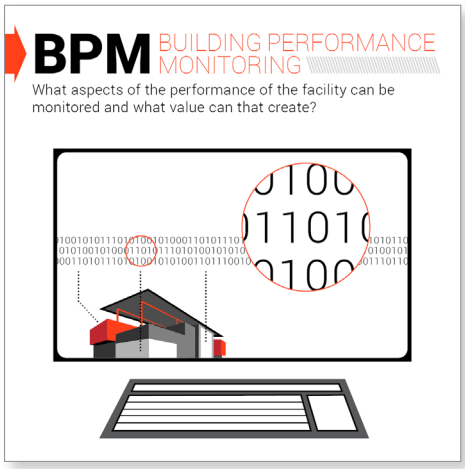


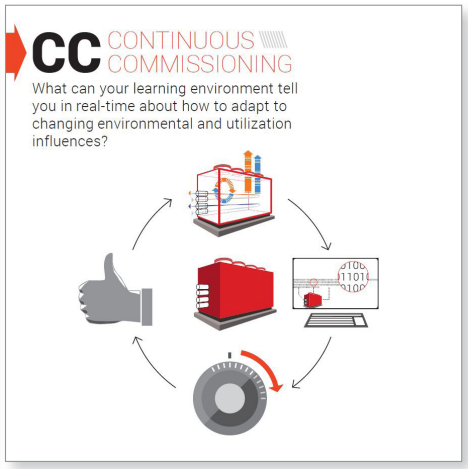
Tier 2 Priorities
Building Performance

DESCRIPTION
Monitor building performance through sensors and technology to encourage carbon emissions reduction, and provide teaching tools for students on how buildings operate.

GOALS

- Ensure that buildings are operating efficiently to conserve resources
- Educate students, teachers, and community members on building operations





Unique Priorities

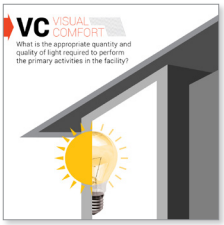
These cards were selected within the top 6 priorities by a single stakeholder group.

students

BEHAVIOR MODIFICATION
Through education and programs around sustainability, schools have the power to positively influence the behavior of students, teachers, and faculty. Behavior changes can ripple into the community as these individuals take their new behaviors home and teach their families.

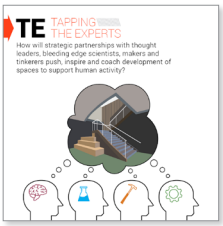
teachers

COMFORT + INDOOR ENVIRONMENTAL QUALITY
To improve occupant wellness, productivity, and health, achieve healthy air quality and create spaces that support visual comfort.



business operations

TAPPING THE EXPERTS
To encourage student growth, develop formal policies, programs, and partnerships for career pathways, and provide the resources and upgrades necessary to support those partnerships.



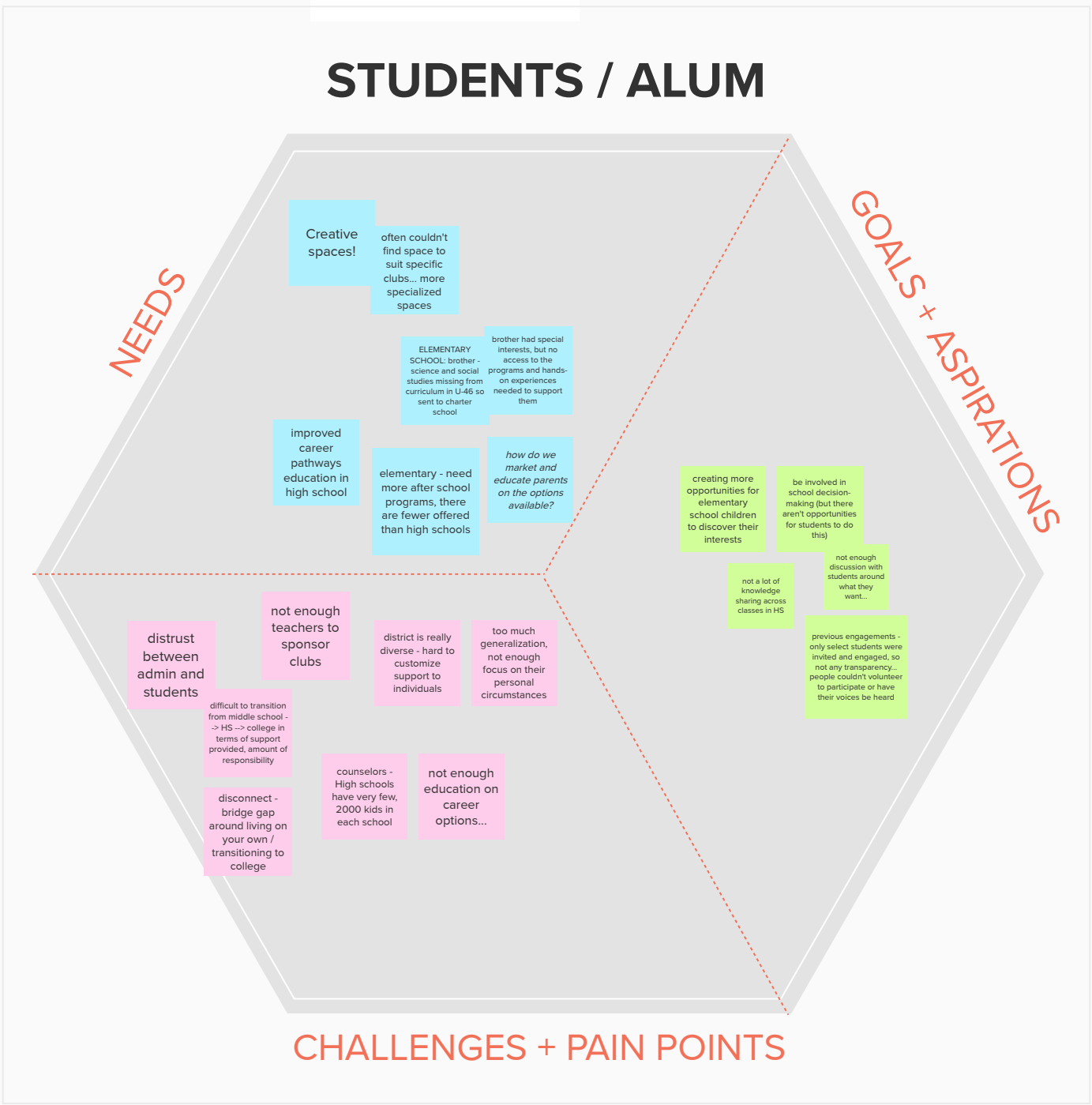
community partners

BEAUTY + INSPIRATION
Provide a beautiful, accessible building and site that project a positive community image and encourage community pride.

APPENDIX

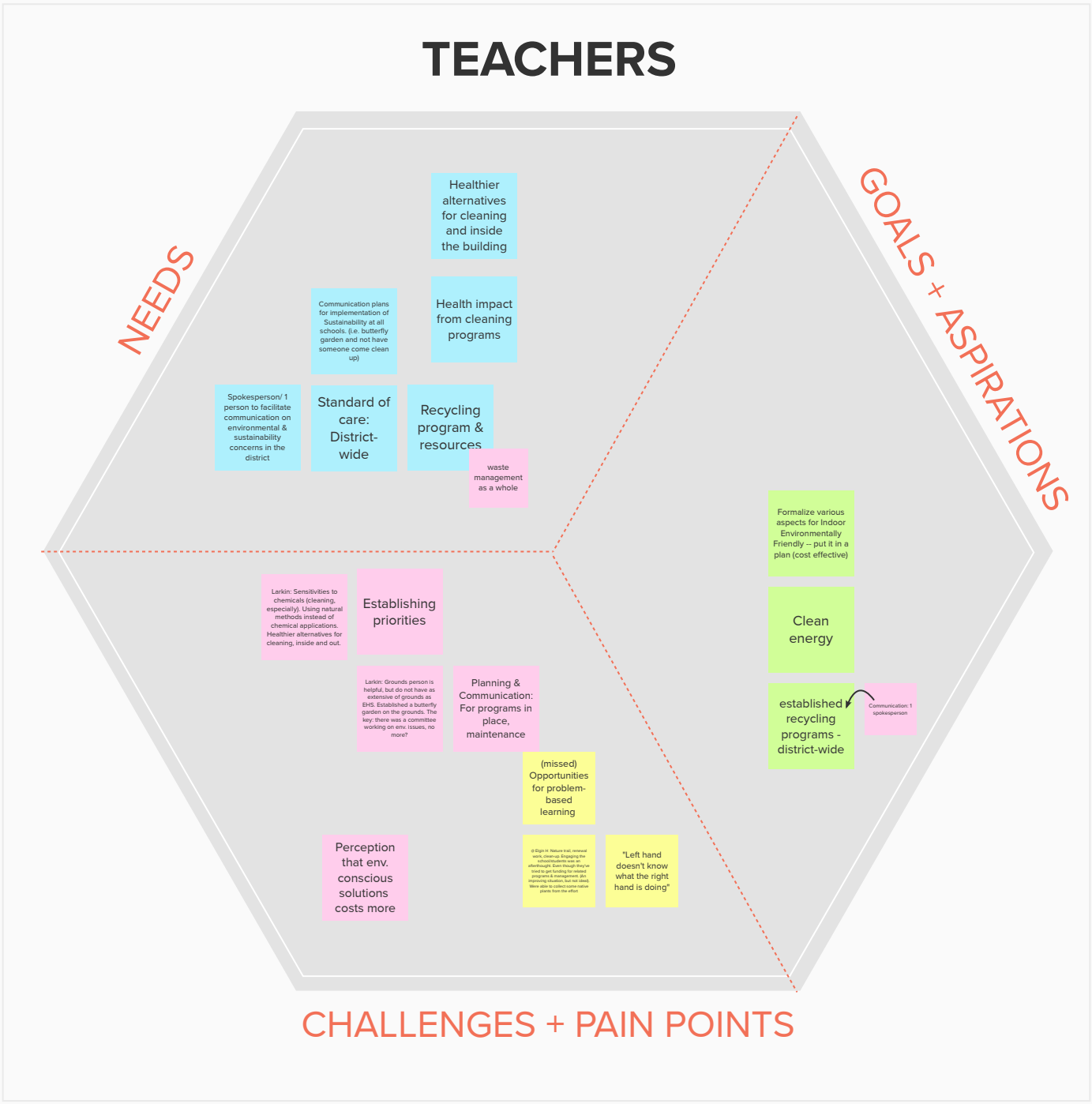
Activity 1

Finding Your Voice



Activity 1

Finding Your Voice



Activity 1

Finding Your Voice

Activity 1

Finding Your Voice

Activity 2
Headline

FACILITATORS:
Lindsey and Melissa

What's the headline in 2030?

U-46 STUDENT SOLVES CLIMATE CRISIS :

Student Led Learning: U-46 students empowered to be the spark of change for global problems.

Bold Idea

Using 100% Red List Free Materials

U-46 Uses 100% Red List Free materials leading to a healthier district

Commitment to lessen the hazardous materials/ the impact of materials on health. Less chemicals, more natural substitues

Bold Idea

Everybody is learning the "WHY" doing more sustainable systems

Facility as source of inspiration. Facility is teaching students & community.

Students: Not just their right, but their responsibility

Build sustainable system, and educate from it - everyone will know WHY

The learning standards support this type of teaching/learning...to help students to solve BOLD problems.

Including students in the process, know the impact of decisions that they're making. Ex. recycling program in district - resource scarce!

Bold Idea

Science club: Encourages advocacy, engagement. Alternative to formal classwork

Consistent, real-world science education at all (incl. elementary) grade levels

Indoor Environmental Quality and connection to cognitive function

Include students to create a sustainable education program for them.

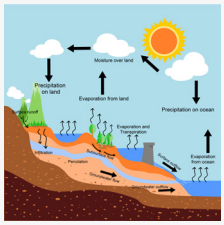
Advocacy: Environment science is a course, but not as well attended as it could be. Potential for exponential impact.

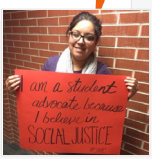
Environmental Science classes...only impacts 200 kids at Elgin per year. Sustainability impacts more than just one subject

More!

Student action

Supporting Image





ADVOCACY

Follow-up Stories

Child Scientist: U-46 students achieve science literacy K-to-Life

Net Zero District -- powered by renewables

Students and teachers collaborate to advocate for empowered learning paths

Activity 2
Headline

SHONA

FACILITATOR: Shona and Penny

What's the headline in 2030?

Insert Headline Here

U-46 brings Sustainability and Diversity together - through their food program

Bold Idea

Provides Scenic Community Gardens that Solve Pollution Issues

Bold Idea

Supporting diversity through sustainable food and vehicle program

Bold Idea

On Site Local Farming Program Allows Students to Grow Local Healthy Foods for Cafeteria Program

CELEBRATING DIVERSITY

Follow-up Stories

- Fresher Healthier Meals at Home: Volunteers compensated with freshly grown produce
- Supports communities and shares to reach zero food waste
- End of day food service sends students home with healthy food
- Healthy Food Program extends to entire community
- Food Transparency Program can demonstrate where food comes from and where the waste goes

Activity 2
Headline

FACILITATORS: Jana and Korey

What's the headline in 2030?

Insert Headline Here

U-46 is uniting force behind net zero waste for community

Bold Idea

All schools have net zero waste and energy

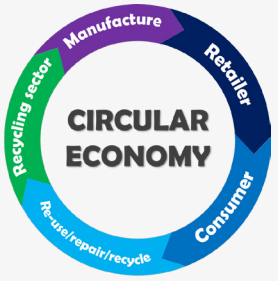
Bold Idea

School Community cooperation & collaboration to achieve a comprehensive waste & composting program that supports community gardens & farm to table.

Bold Idea

Young learners become environmental stewards (part of curriculum)

Supporting Image



Follow-up Stories

- Aligning goals across ages & economic opportunity
- Equitable access to opportunities for outdoor learning regardless of school location
- Individuals taking action have impact
- 100% Food within U-46 comes from student gardens on site
- U-46 Leads the way in Farming/Recycling/Gardening based curriculum and TEACH THEIR PARENTS!

Activity 2
Headline

FACILITATORS: Keri and Grace

What's the headline in 2030?

Insert Headline Here

U-46 is green from the classroom to the bottom line!

Bold Idea

Students in U-46 Pathways have planned, designed, assembled, and installed solar and wind infrastructure across the district

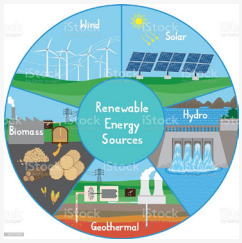
Bold Idea

automotive programs focus on EV training

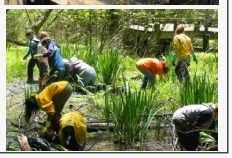
Bold Idea

composting facility with worm composting, permaculture / student agriculture

Supporting Image



Training Course for Electric Vehicles



Follow-up Stories

- solar panel energy cost savings fund innovative training programs on renewable energy and electric vehicles
- thriving ecological reserve on school property provides career training on forestry
- art, music, and humanities programs examine sustainability and culture
- Total carbon footprint has been reduced by 50%

Activity 3

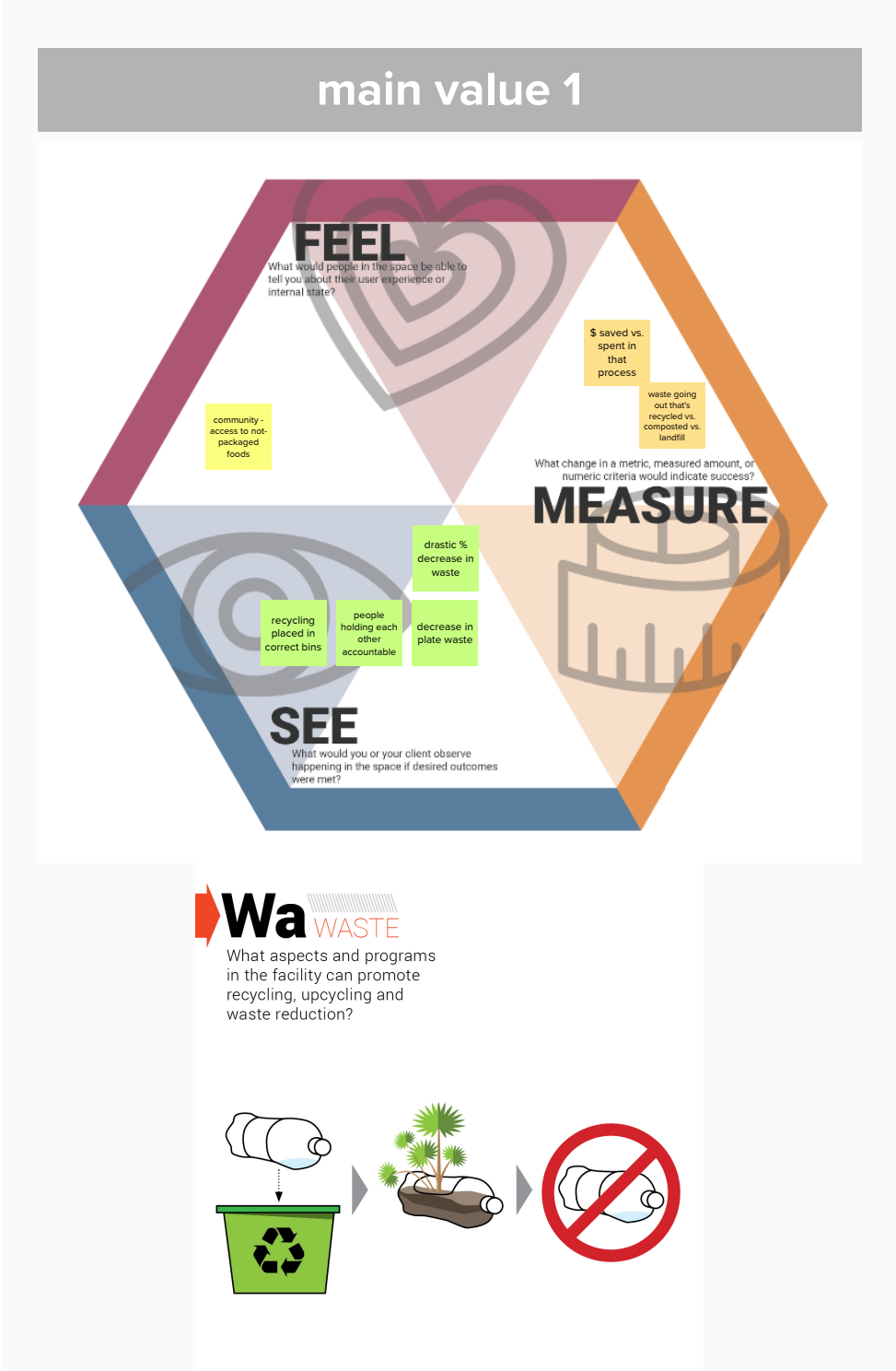
Prioritizing VALUES

VALUE	Students / alumni	Business + community partners	Teachers	Business operations
Access		10		
Air Quality			4	
Beauty and Inspiration		6		
Behavior Modification	6			
Building Materials			8	
Building Performance Monitoring		5		2
Building Resilience				7
Carbon				10
Community Activation / Access	5	**1**	2	6
Community Resilience		11		
Continuous Commissioning		12		11
Diversity	8	2		
DIY Space and Placemaking	4			
Emotional Resilience	3		3	
Energy			10	**1**
Environmental Awareness	2	4	**1**	5
Equity		3		4
Evidence-Based Learning Modalities				8
Goods and Supplies	9			
Life Cycle Cost		8		
Permeability			12	
Pest Management			7	
Site Design		9		
Sustainable Food Sourcing	7	7	5	
Tapping the Experts				3
Thermal Comfort	12			
Transparency				9
Visual Comfort			6	

selected by all groups
selected by 3 of 4 groups
selected by 2 of 4 groups
selected by one group

Activity 4: Students

See Measure Feel



Activity 4: Students

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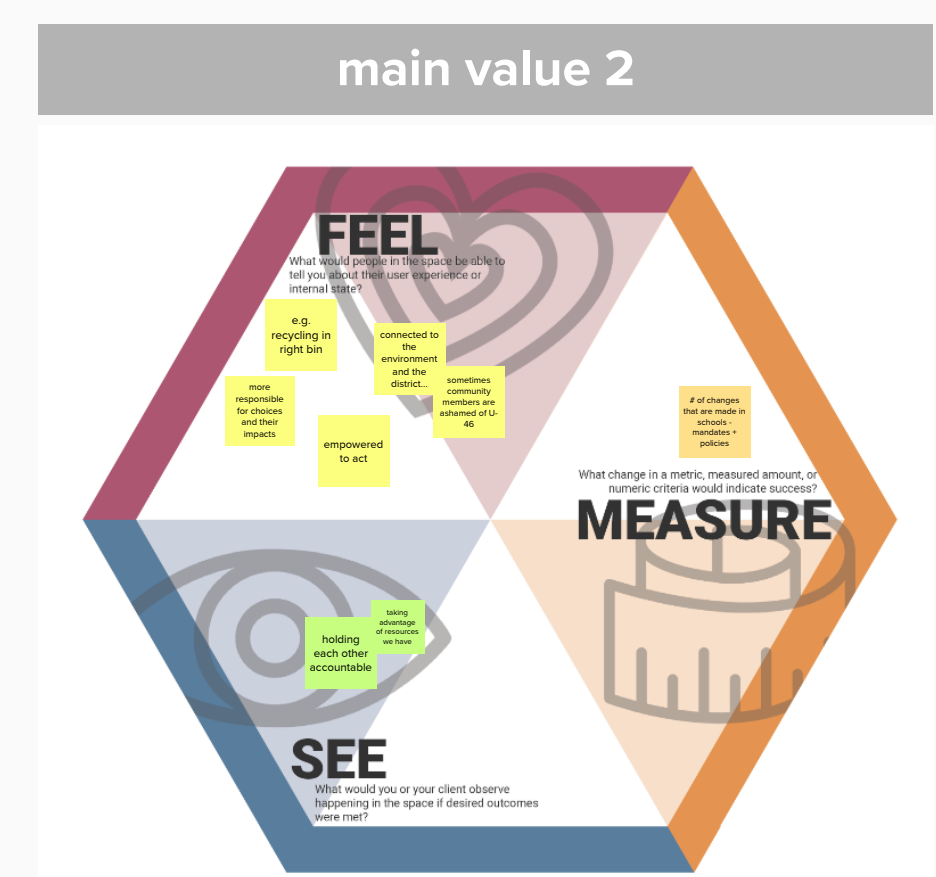

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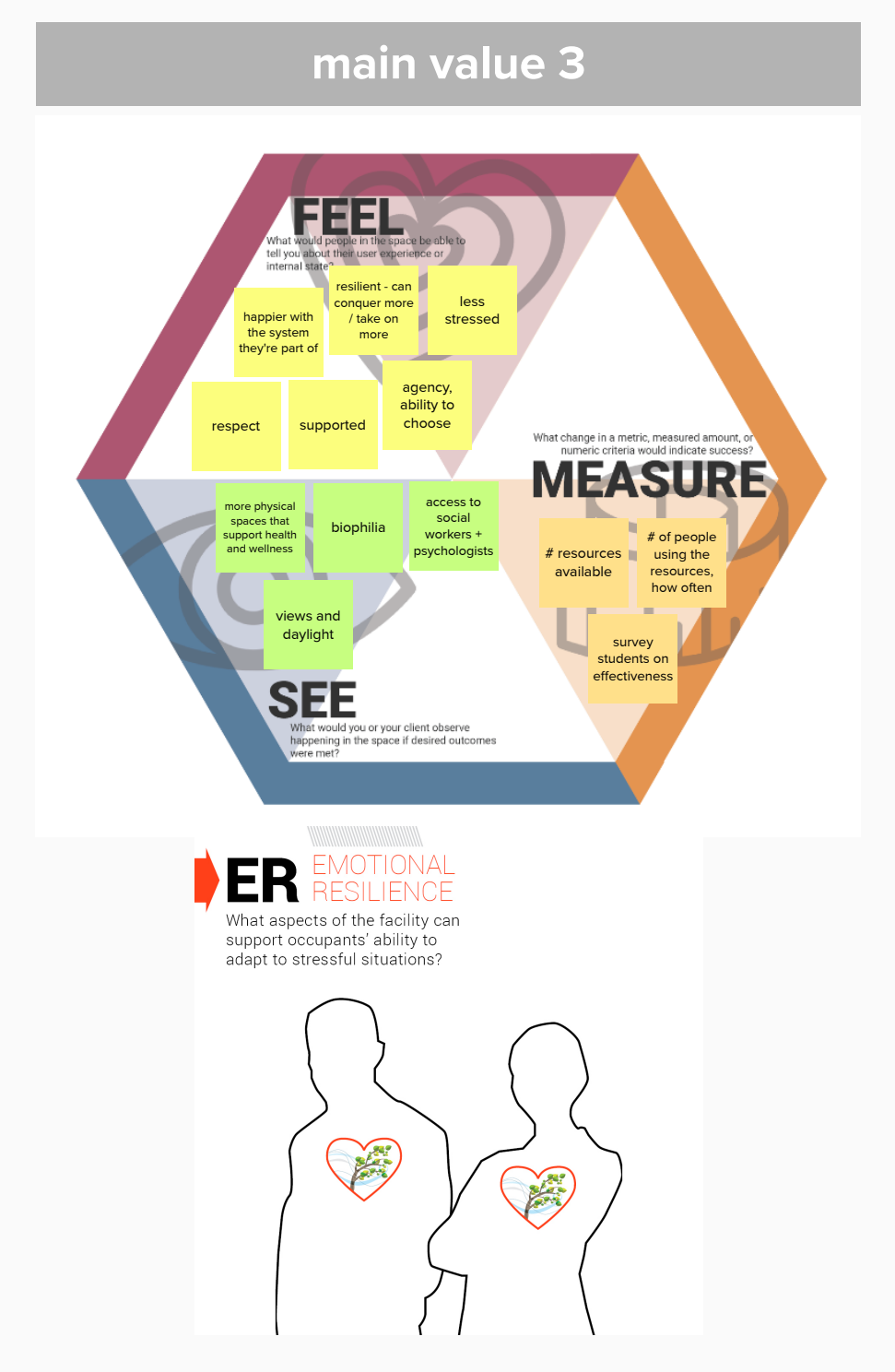

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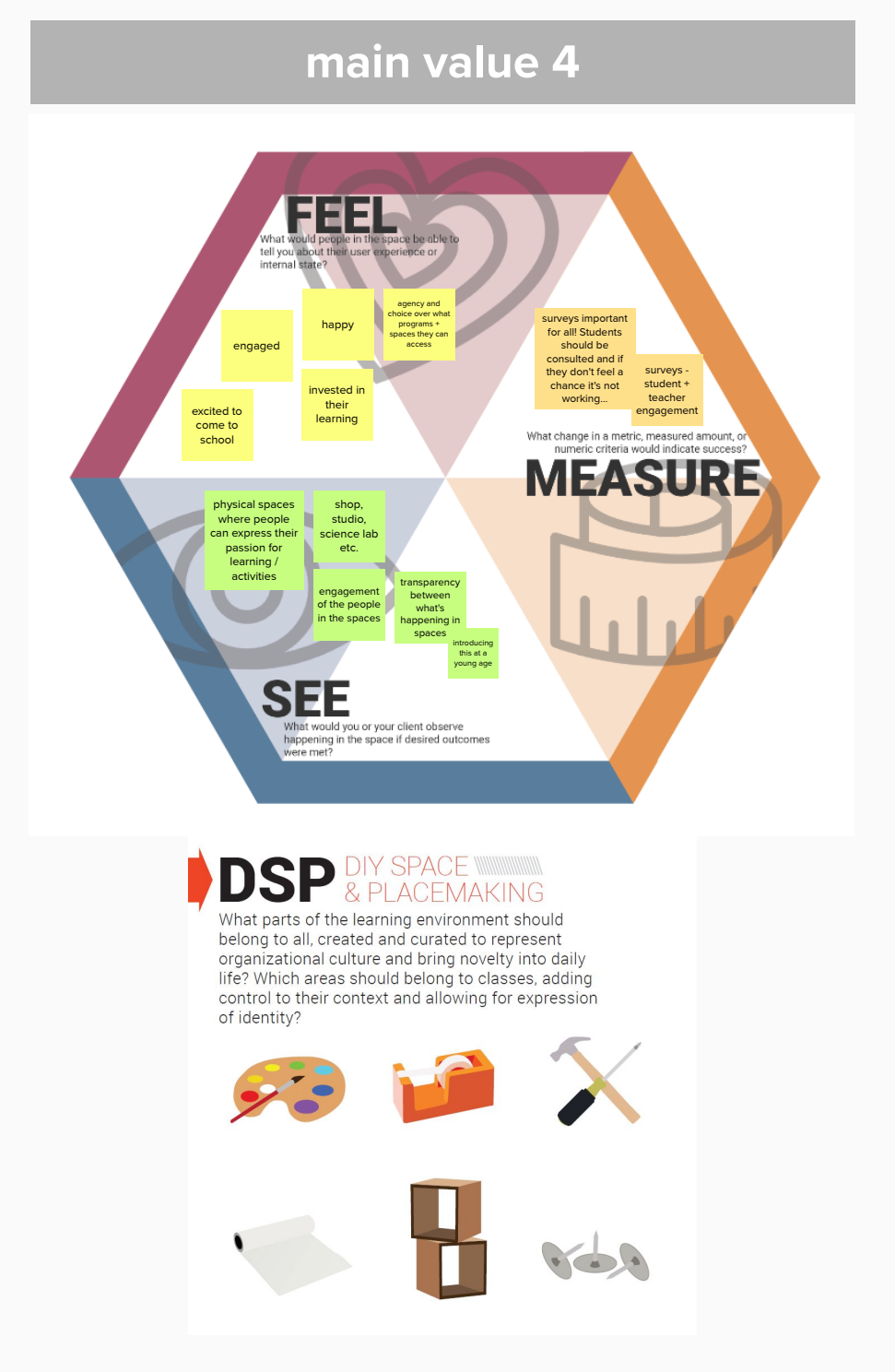

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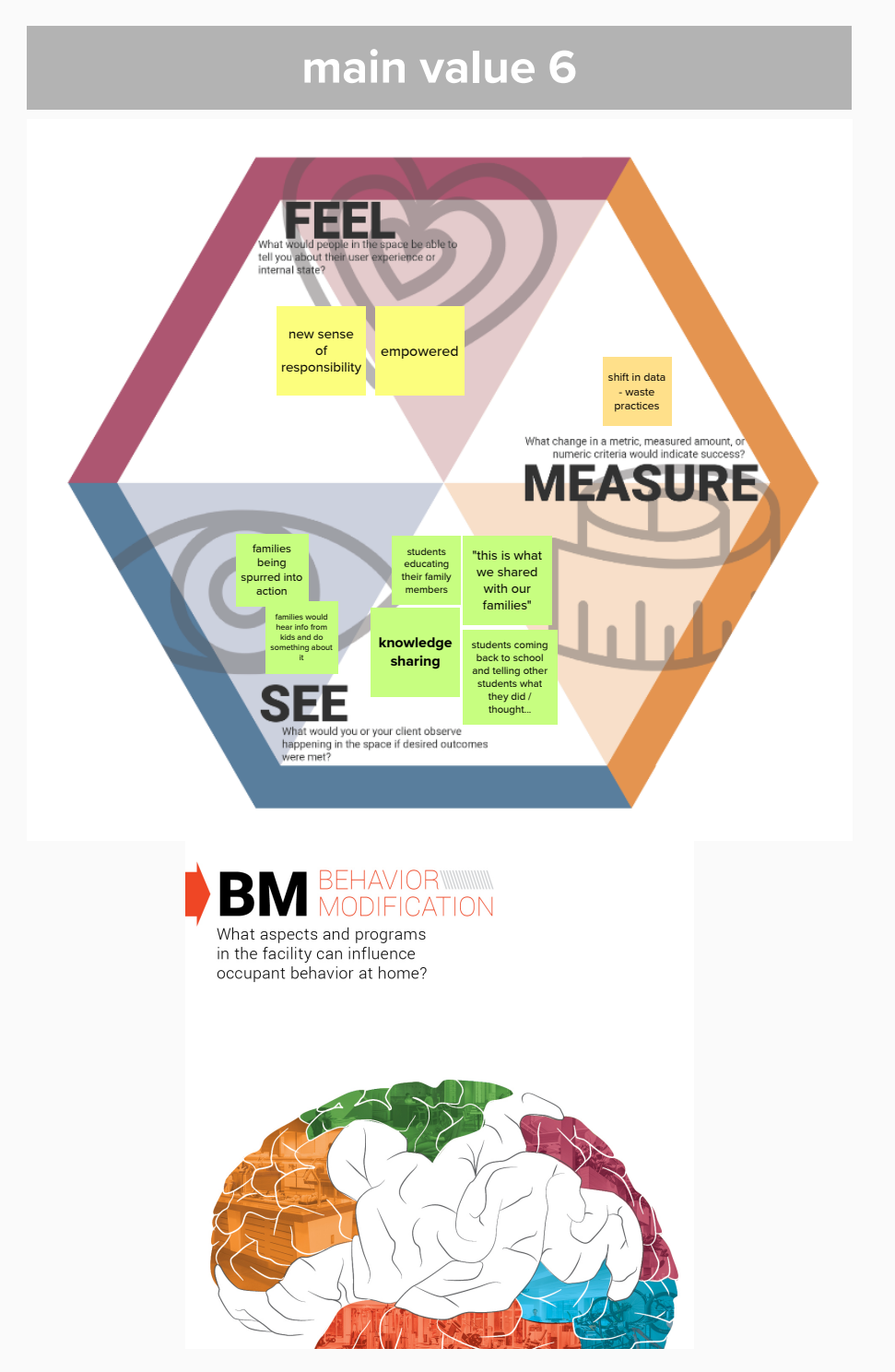

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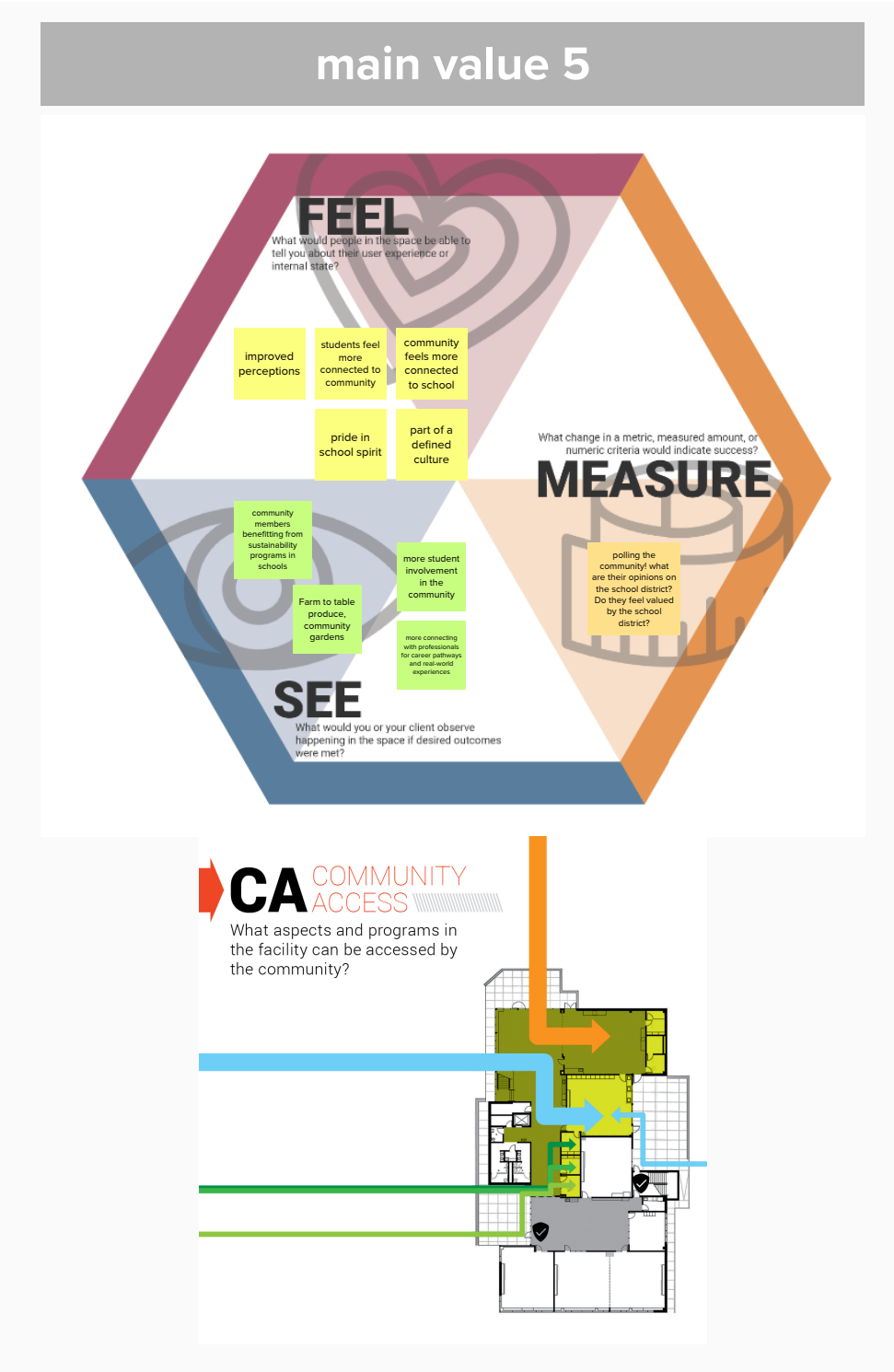
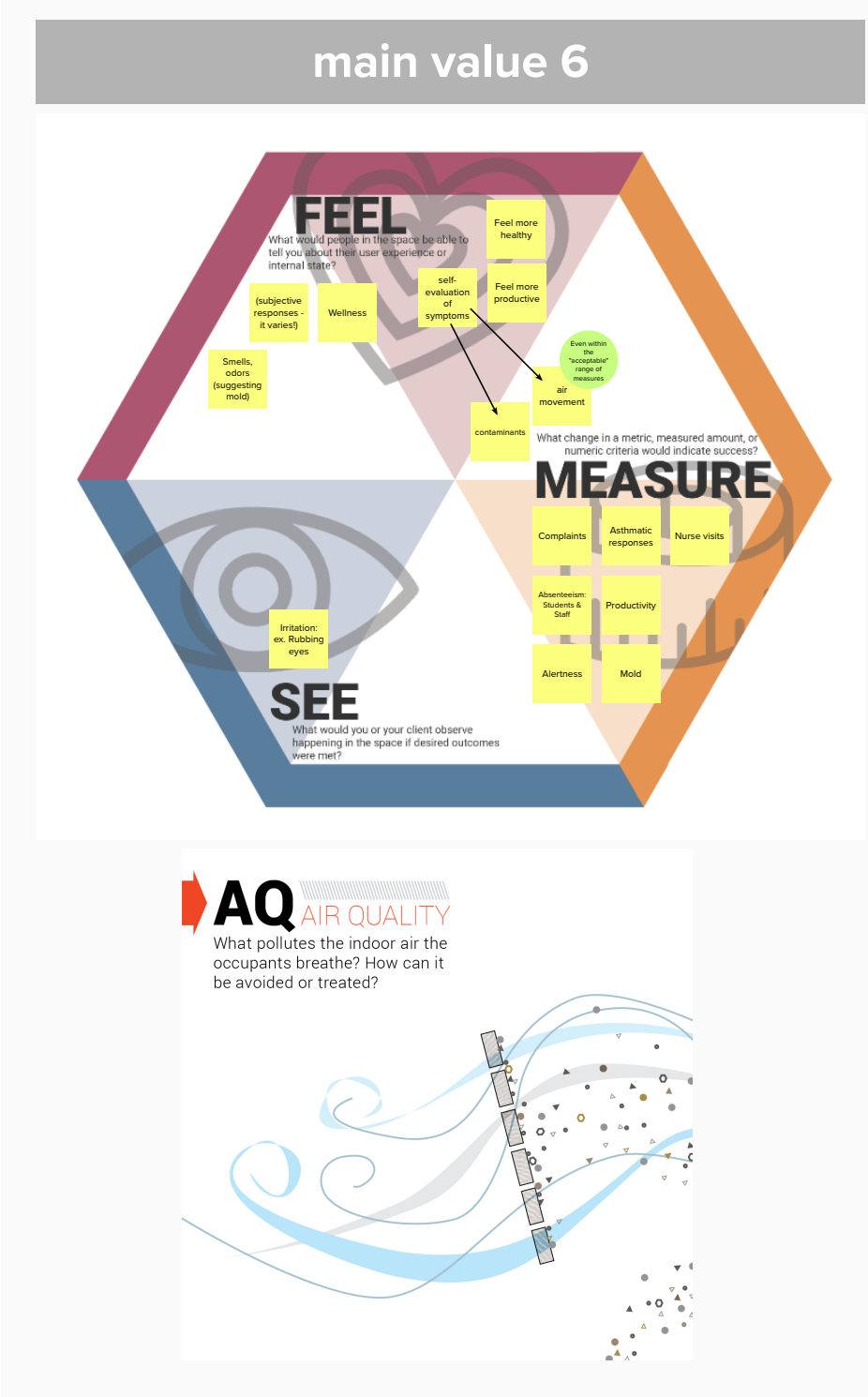


Activity 4: Teachers

See Measure Feel



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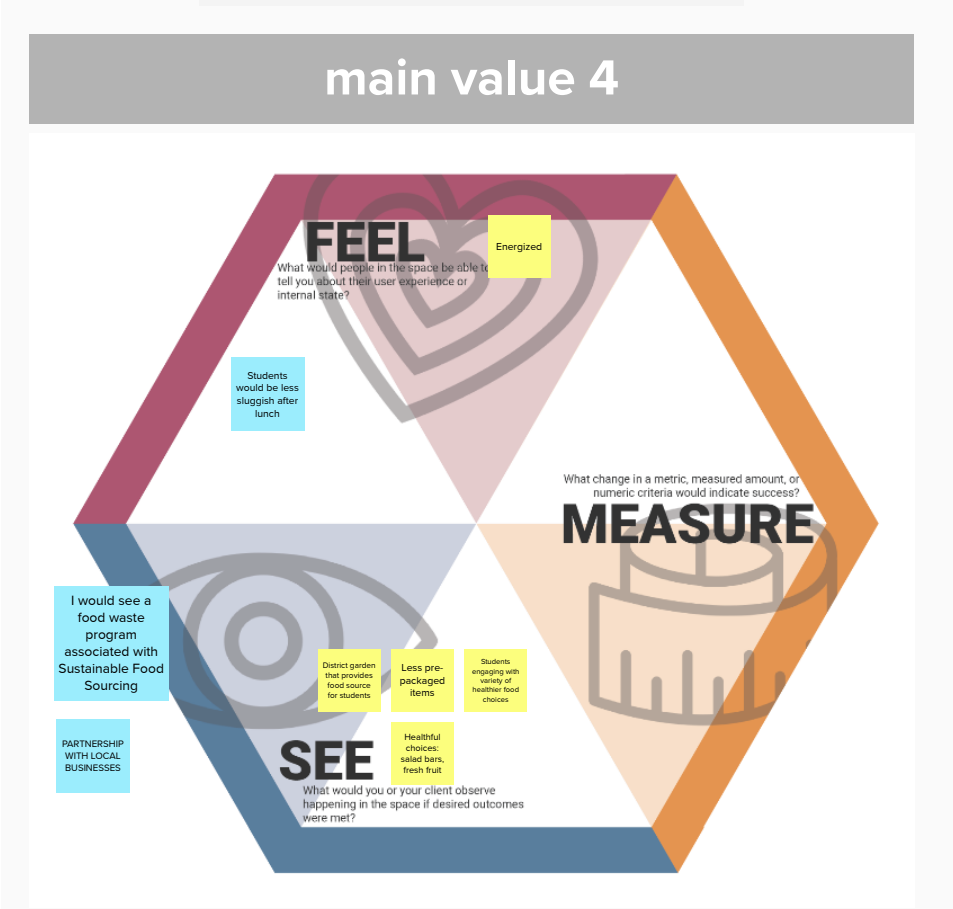

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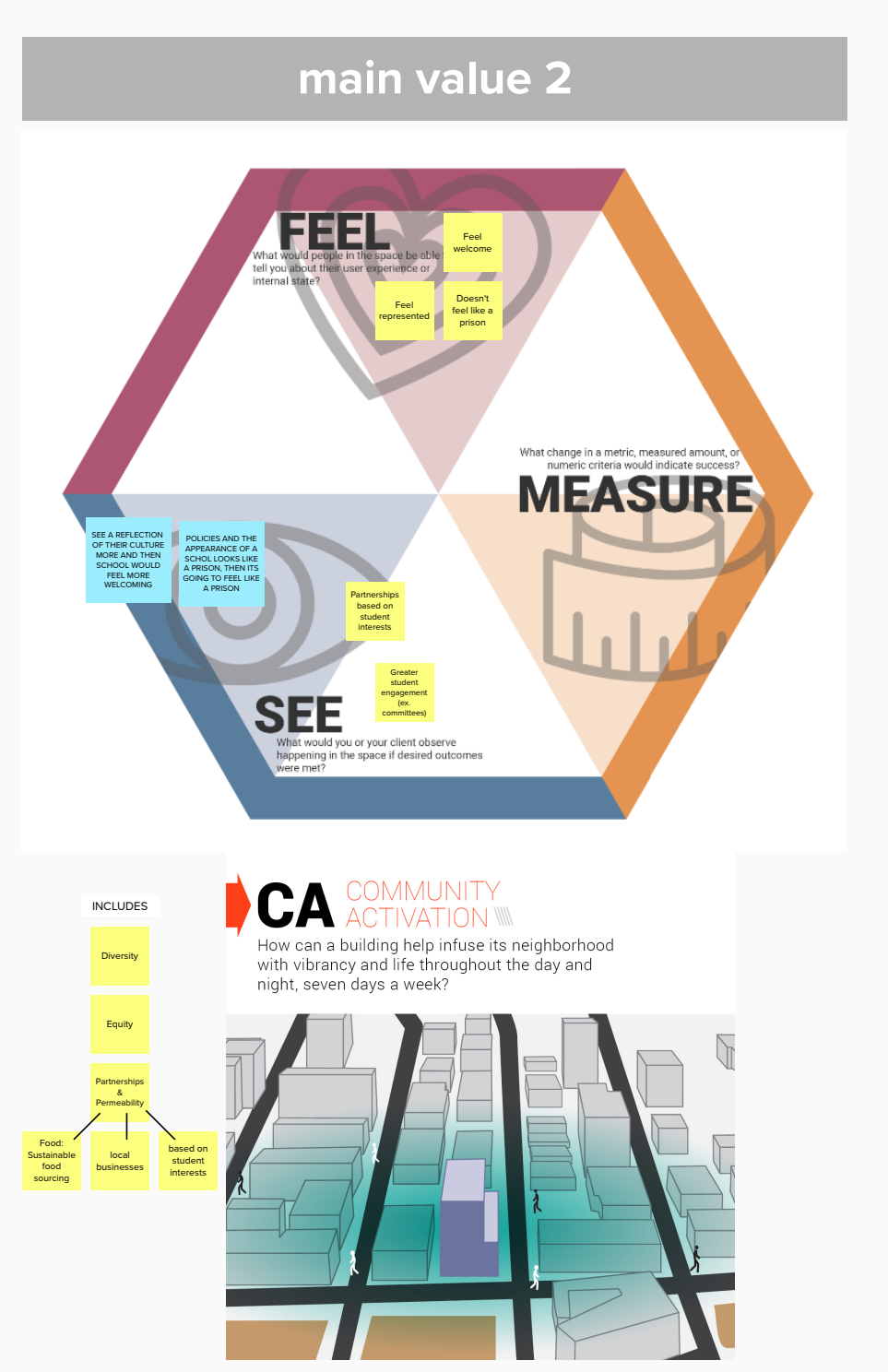
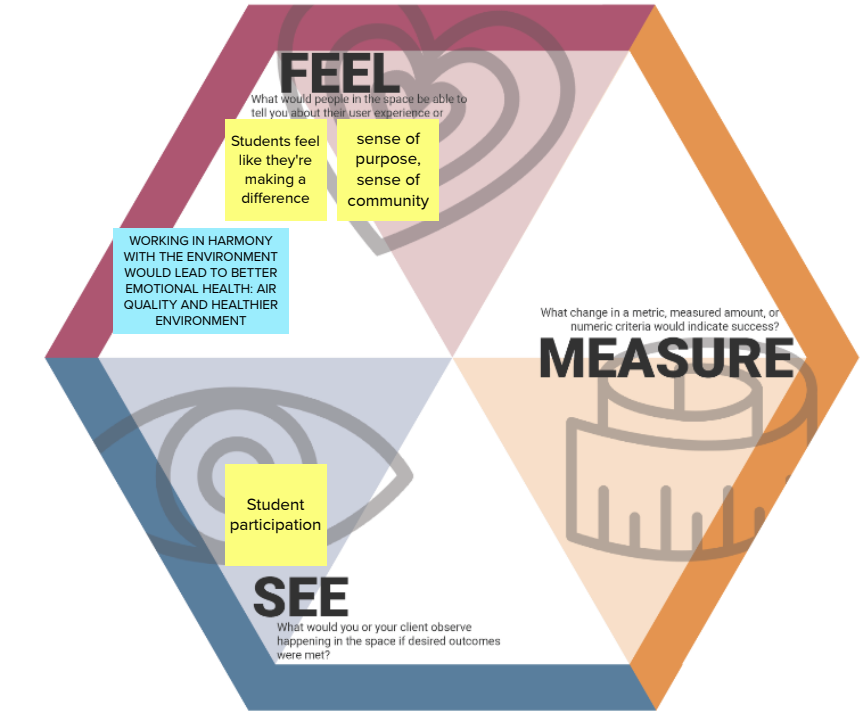
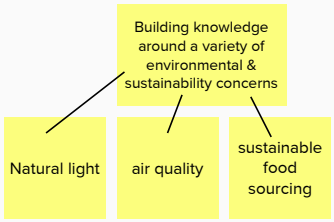


Activity 4: Teachers

See Measure Feel

main value 1





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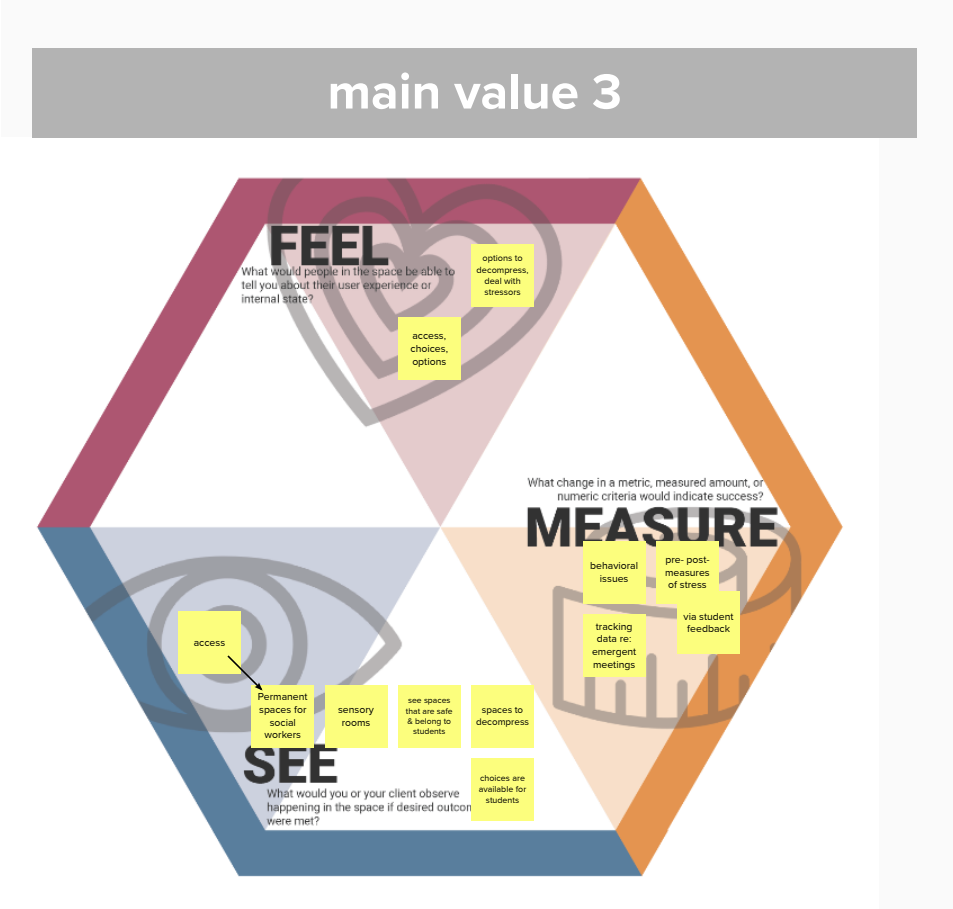

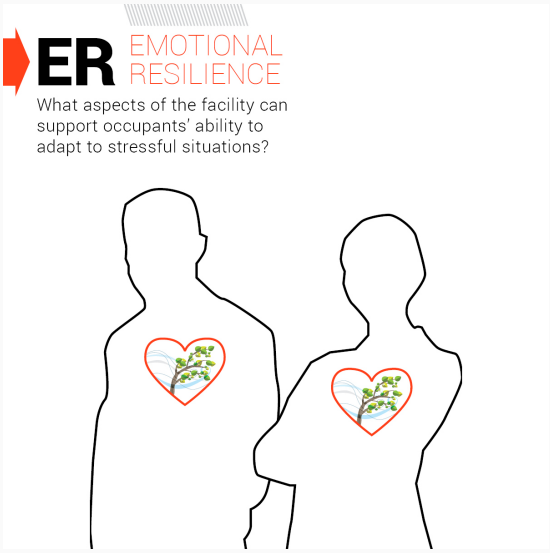

Activity 4: Teachers

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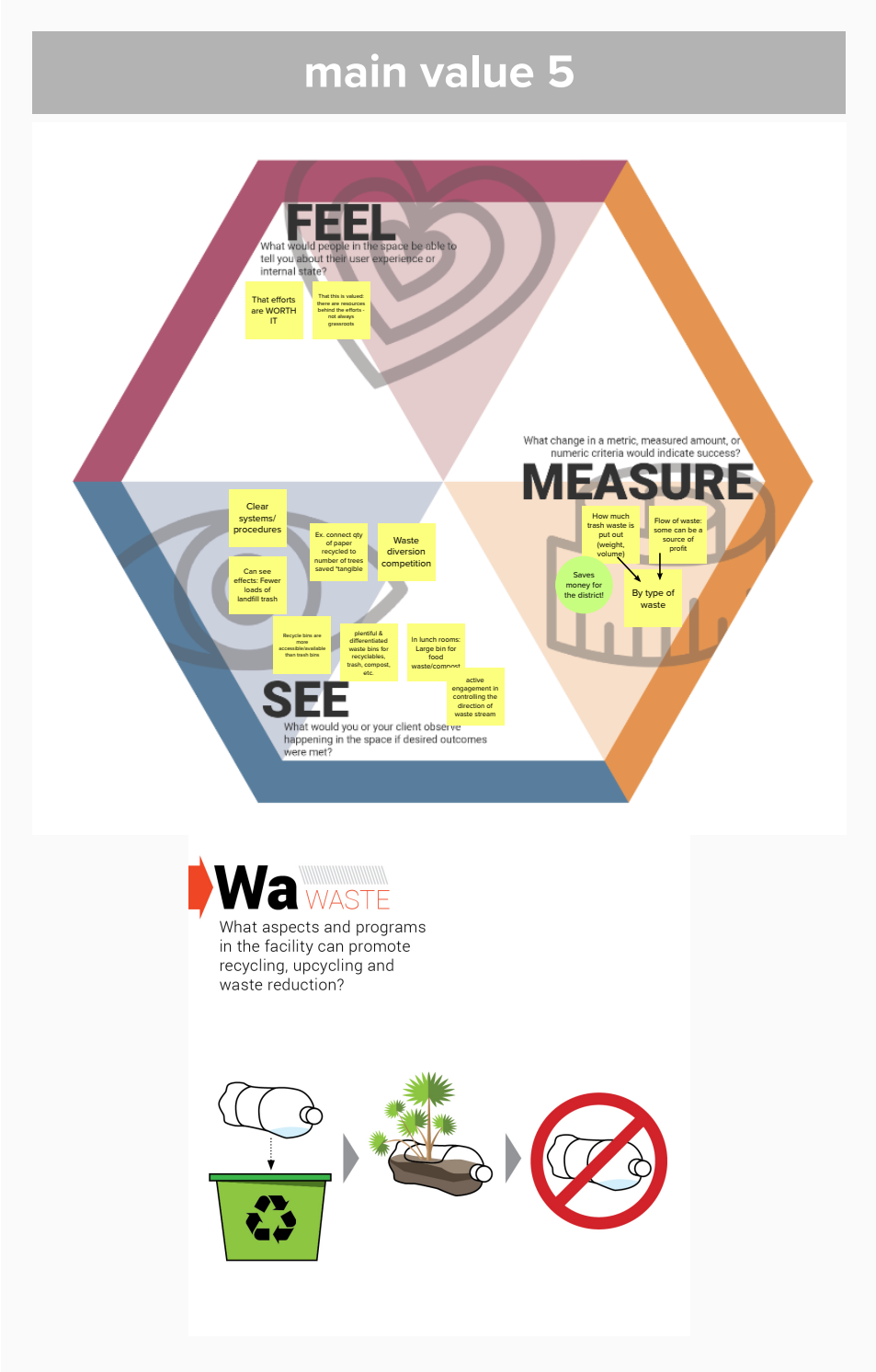
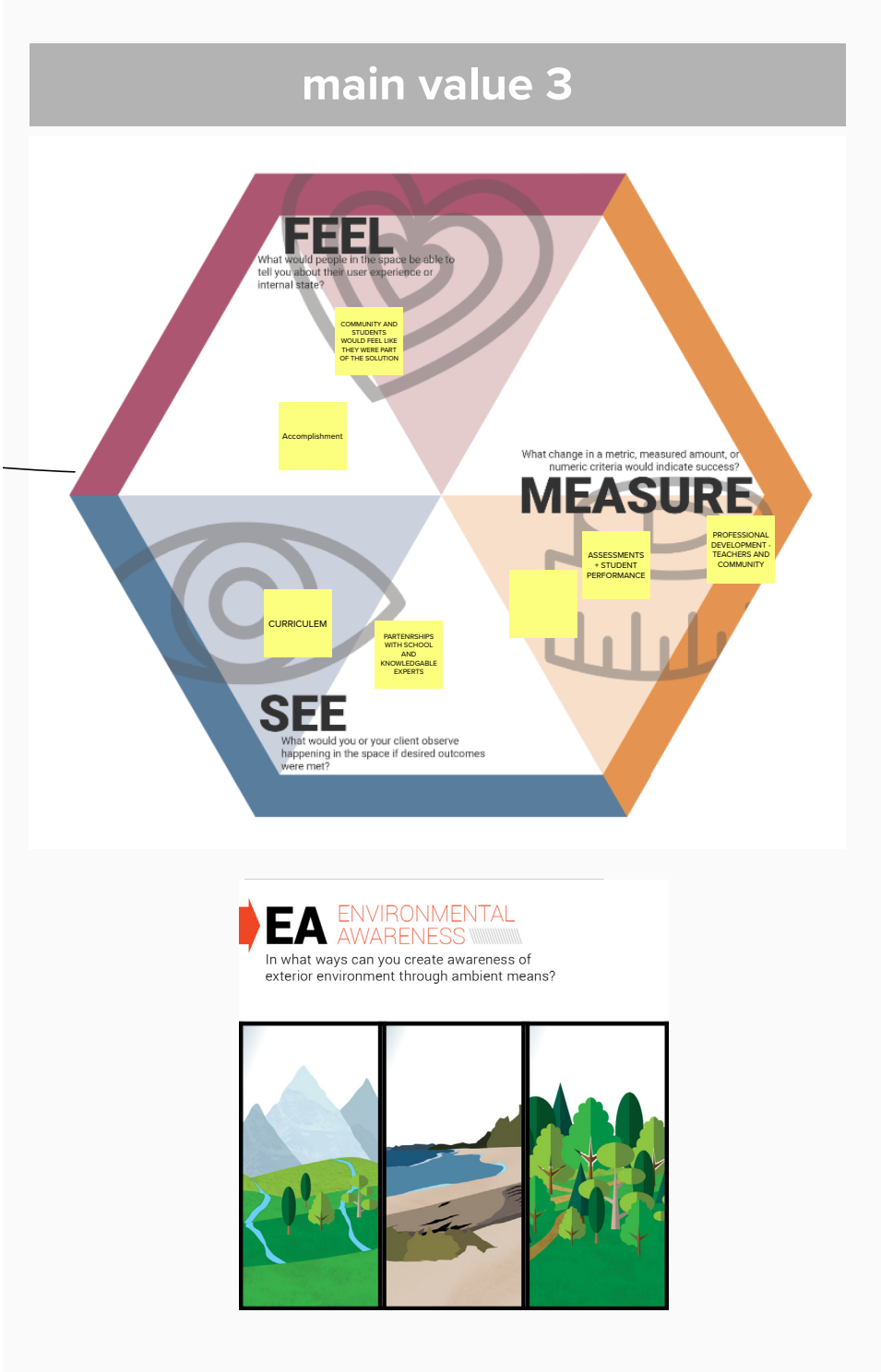


Activity 4: Business Operations

See Measure Feel



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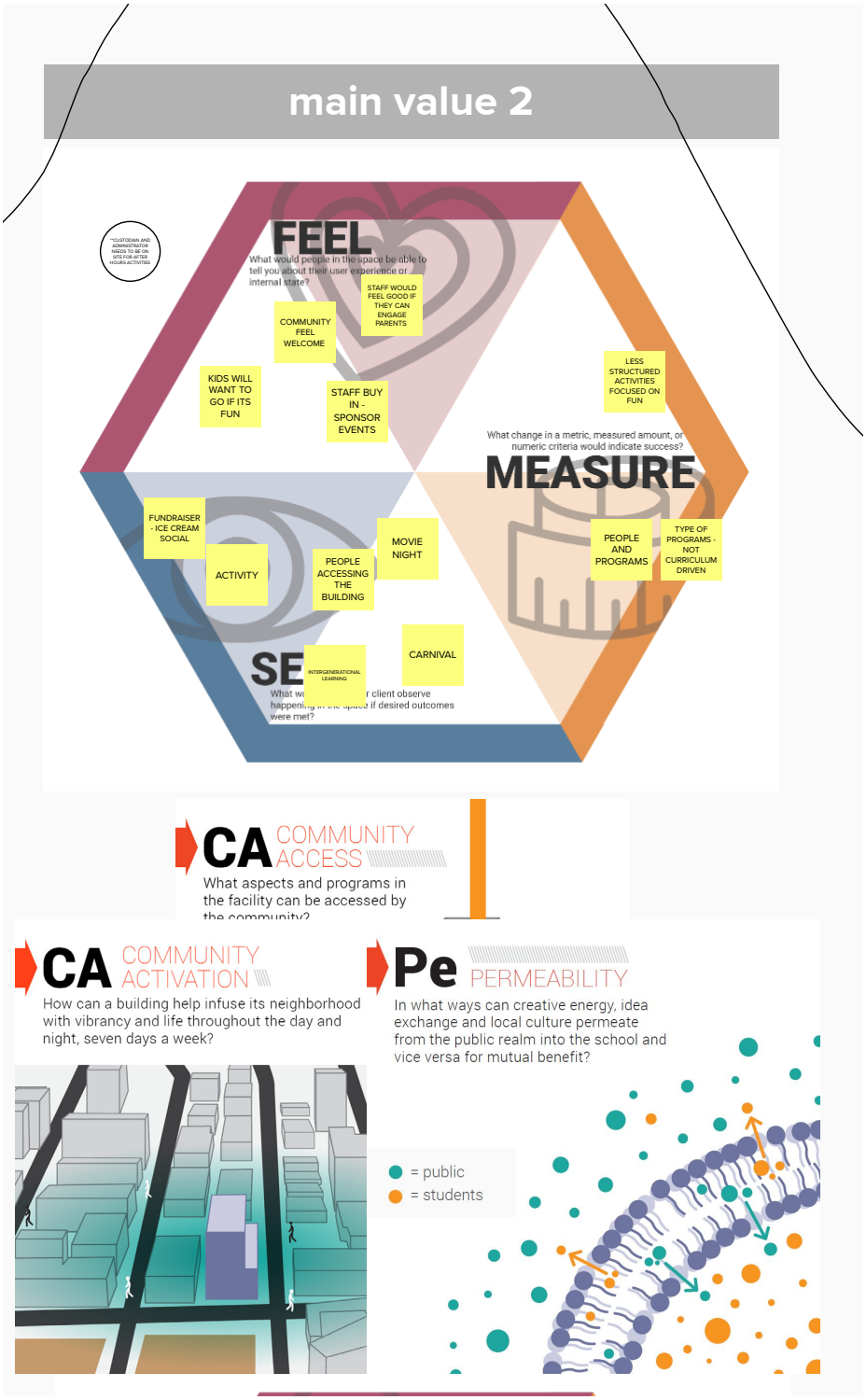

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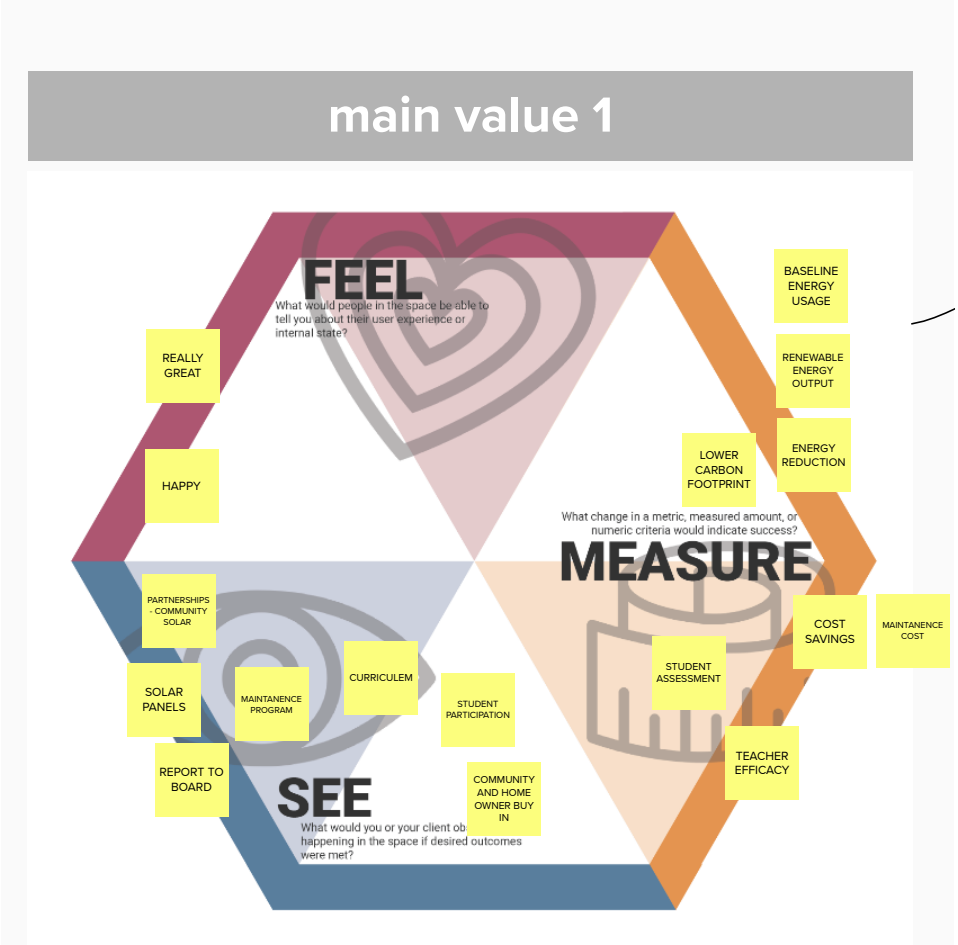

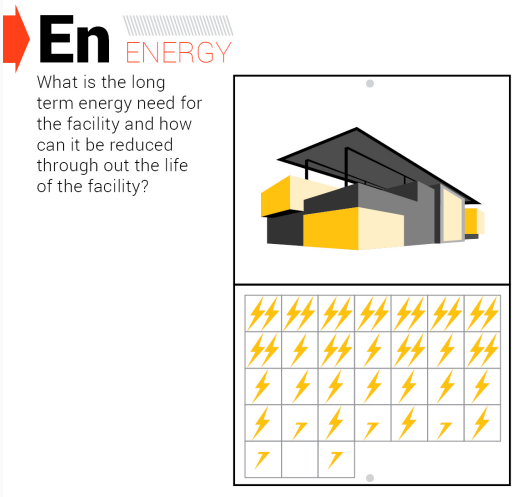

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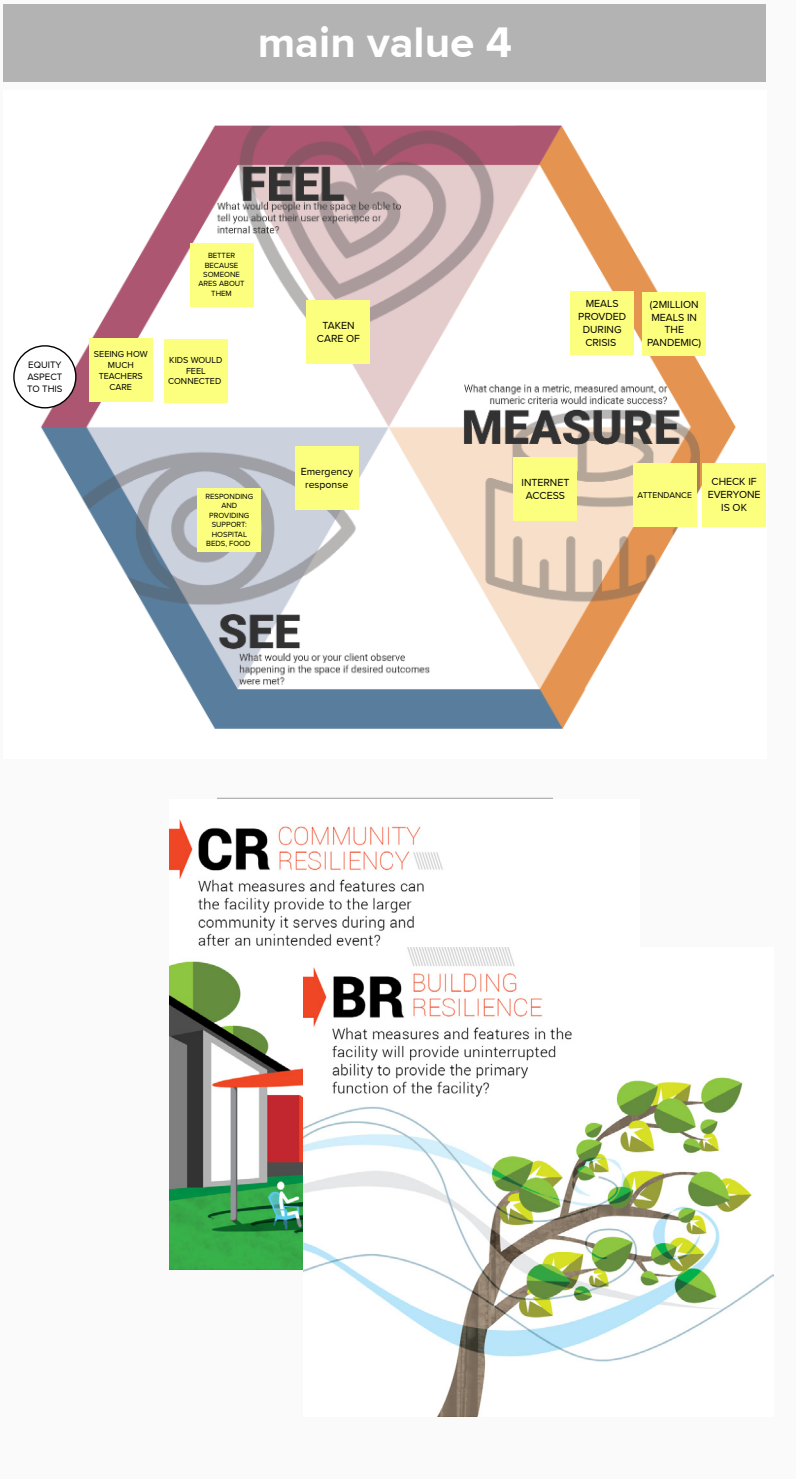

Activity 4: Business Operations

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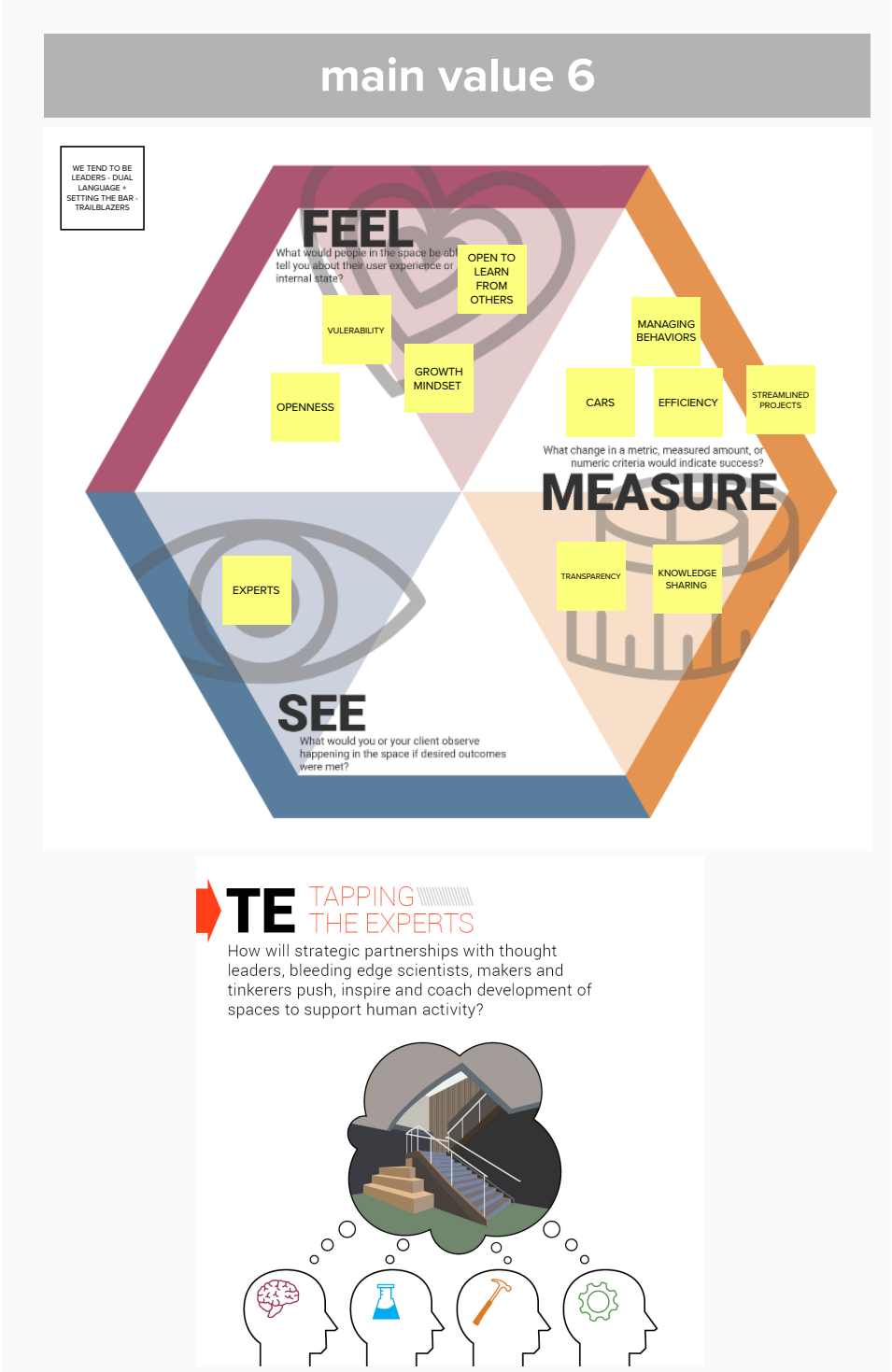

Activity 4: Business & Community Partners

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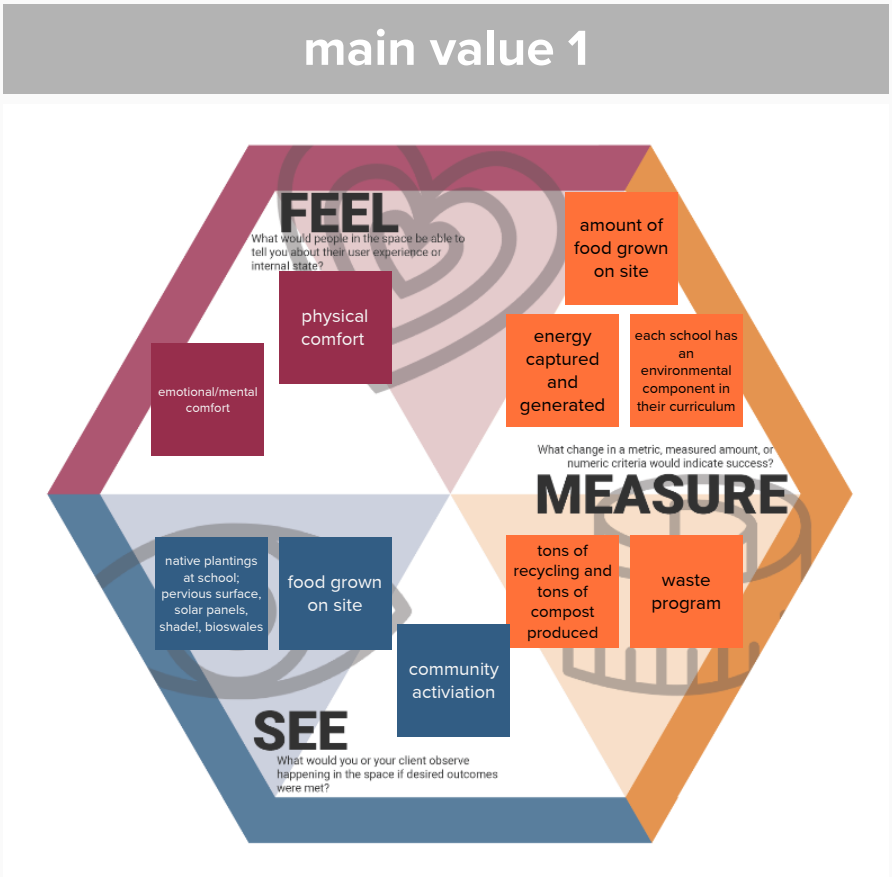

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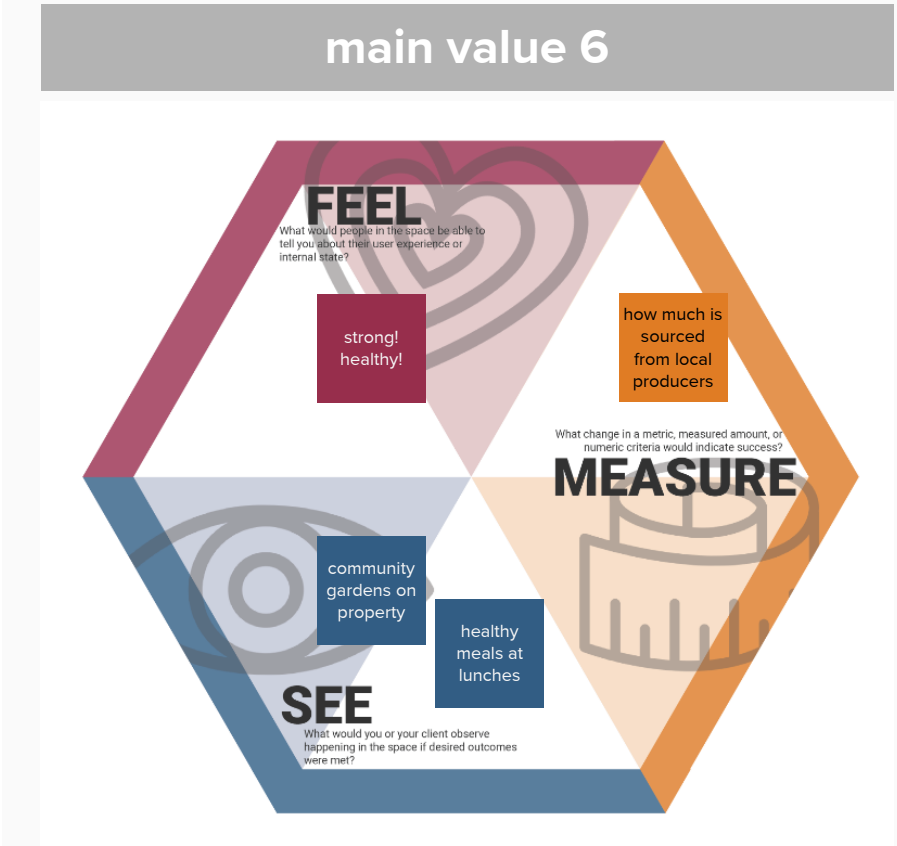

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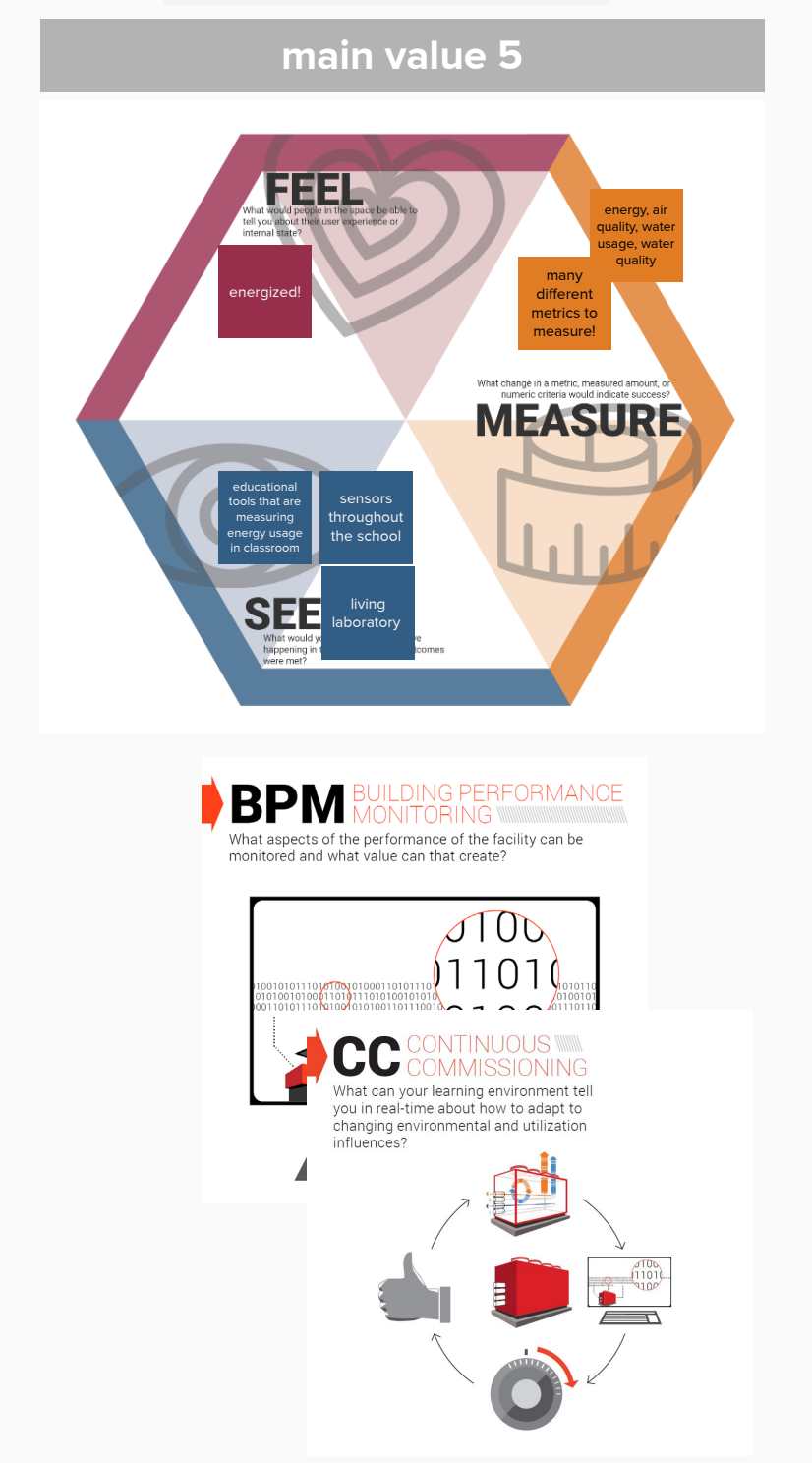

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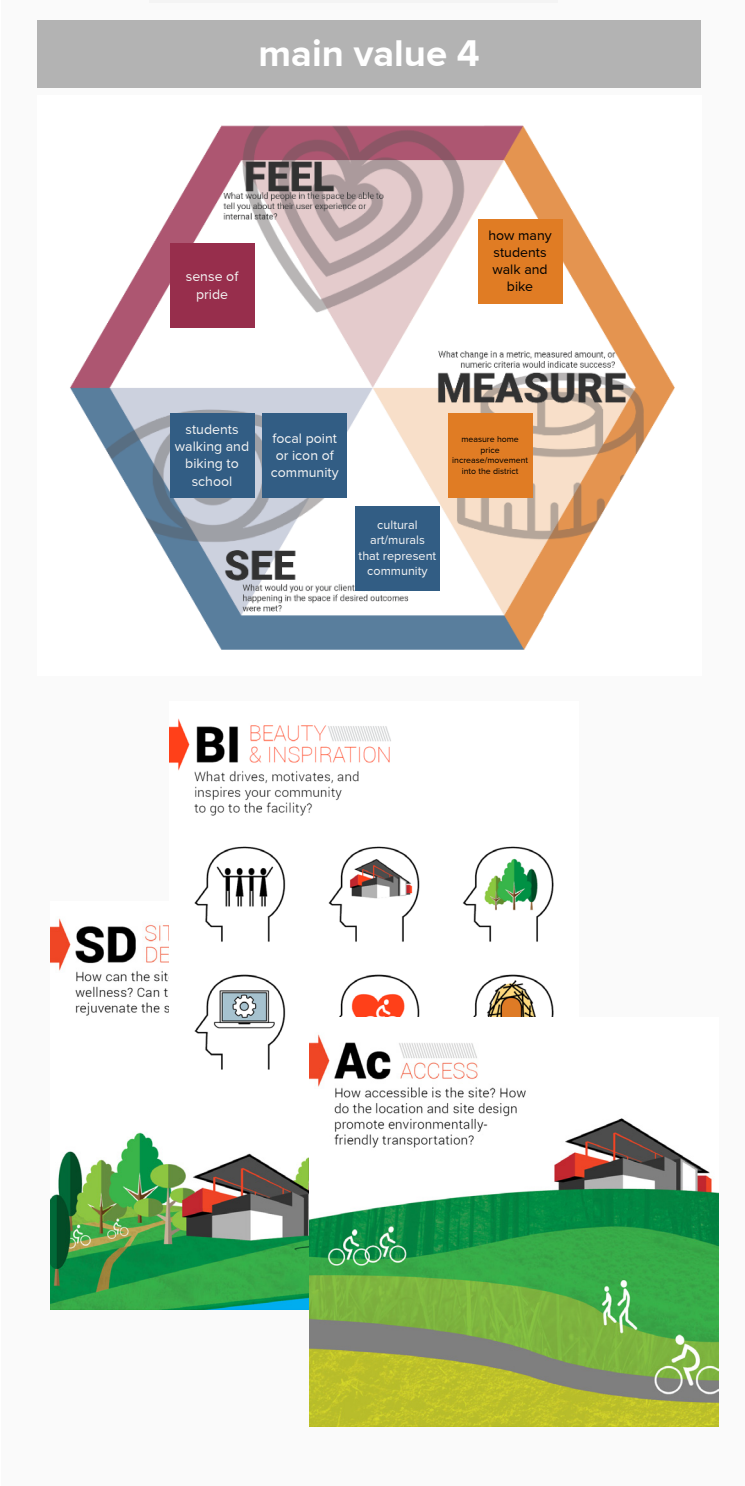

Activity 4: Business & Community Partners

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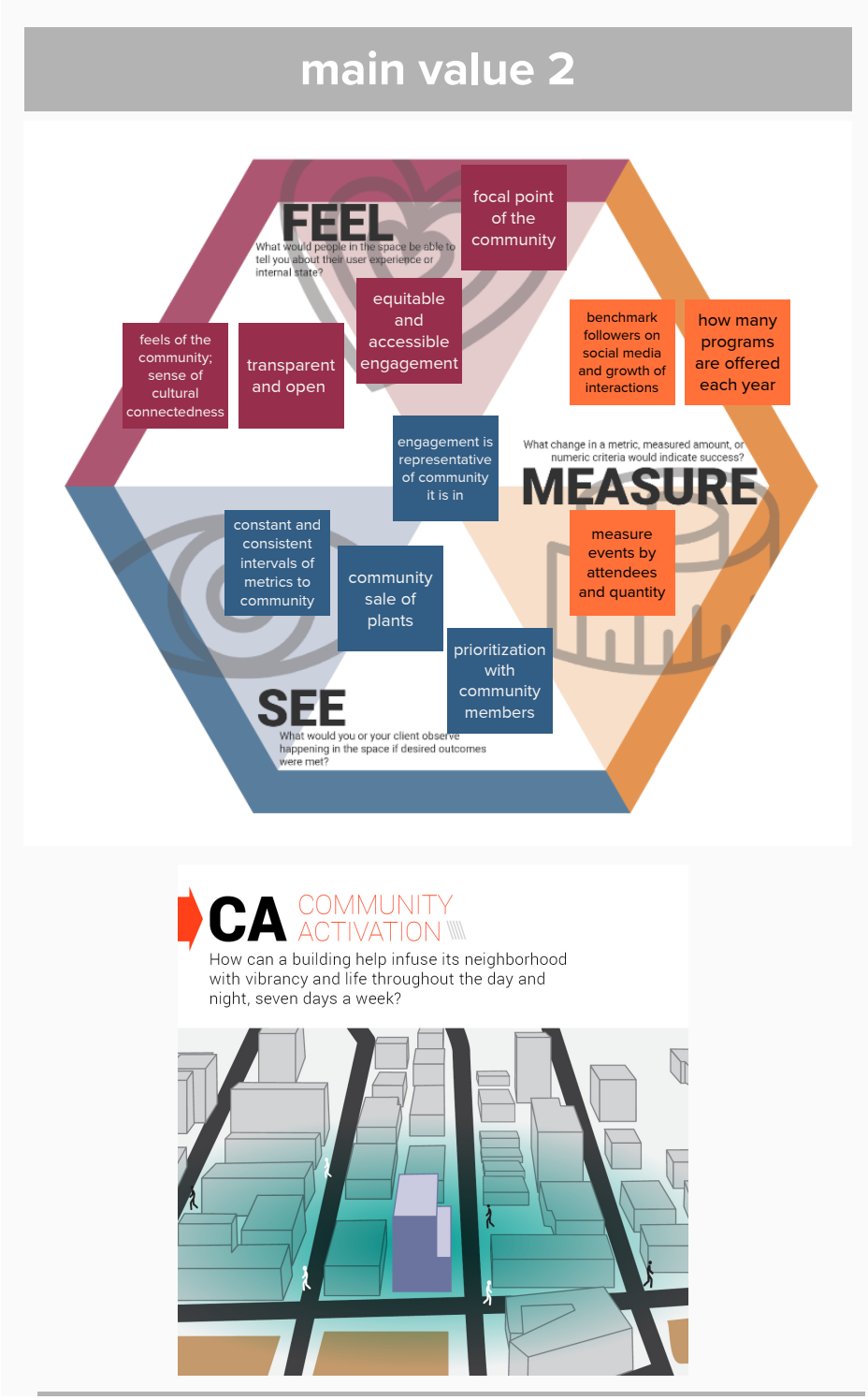
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