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Know to Grow is a program focused on student-led collaborative project-based learning, through public arts and science initiatives. The program is centered around 6 values that an engaged learner must "know to continue to grow", those values are *critical thinking, mindfulness, compassion, creative problem solving, humility,* and *confidence*. At its core this program addresses the urgent need for students to be given the opportunity to engage with complex issues that impact their social and emotional realities in an honest and intersectional way. This program would equip students with the skills and confidence needed to tackle real-world challenges but would also foster a sense of collective responsibility and empowerment which are essential qualities for navigating an increasingly complex and uncertain future.

Beginning with conversation and research, the program delves into the tangible experiences of climate change, leveraging partnerships with diverse stakeholders such as educators, scientist, and artisans. Students are encouraged to seek guidance and testimony from their family and community members. Together, students embark on a journey of problem identification, ideation, and prototyping, guided by a shared decision-making process. Their collective efforts culminate in tangible projects installed in public spaces, seamlessly blending functionality with community engagement. **Ultimately, Know to Grow aspires to empower students to recognize themselves as adept problem solvers, catalysts for change, and resilient collaborators, ultimately nurturing a lifelong commitment to leadership, effective collaboration, environmental advocacy and community enrichment.**

WHY EDUCATION?

At its essence, education stands as the primary enduring solution to the multifaceted challenges confronting our contemporary world. Whether grappling with issues of inequality, climate change, or consumerism, the cultivation of critical thinking, creativity, and compassion among our youth is paramount. **If we are not engaging our youth in activities that build critical thinking, creativity, and compassion, how are they expected to do any better than we are doing currently?**

WHY PUBLIC SPACE?

Public Space is accessible and allows for the most interaction with infrastructure, natural and unnatural. Situating these projects in public spaces like sidewalks, parks, gardens, or transit centers allows for immediate public engagement and initial context for the project to root itself in. When situating projects in public space students are also tasked with becoming the educators. No one can change an adult's mind like his child can, and when projects are situated in public space it gives a student the opportunity to share it with those around them. This grassroots education model is pivotal in nurturing a sense of pride and ownership among students, instilling a deep-seeded connection to and investment in their local community.

WHAT IS GROUND UP EDUCATION?

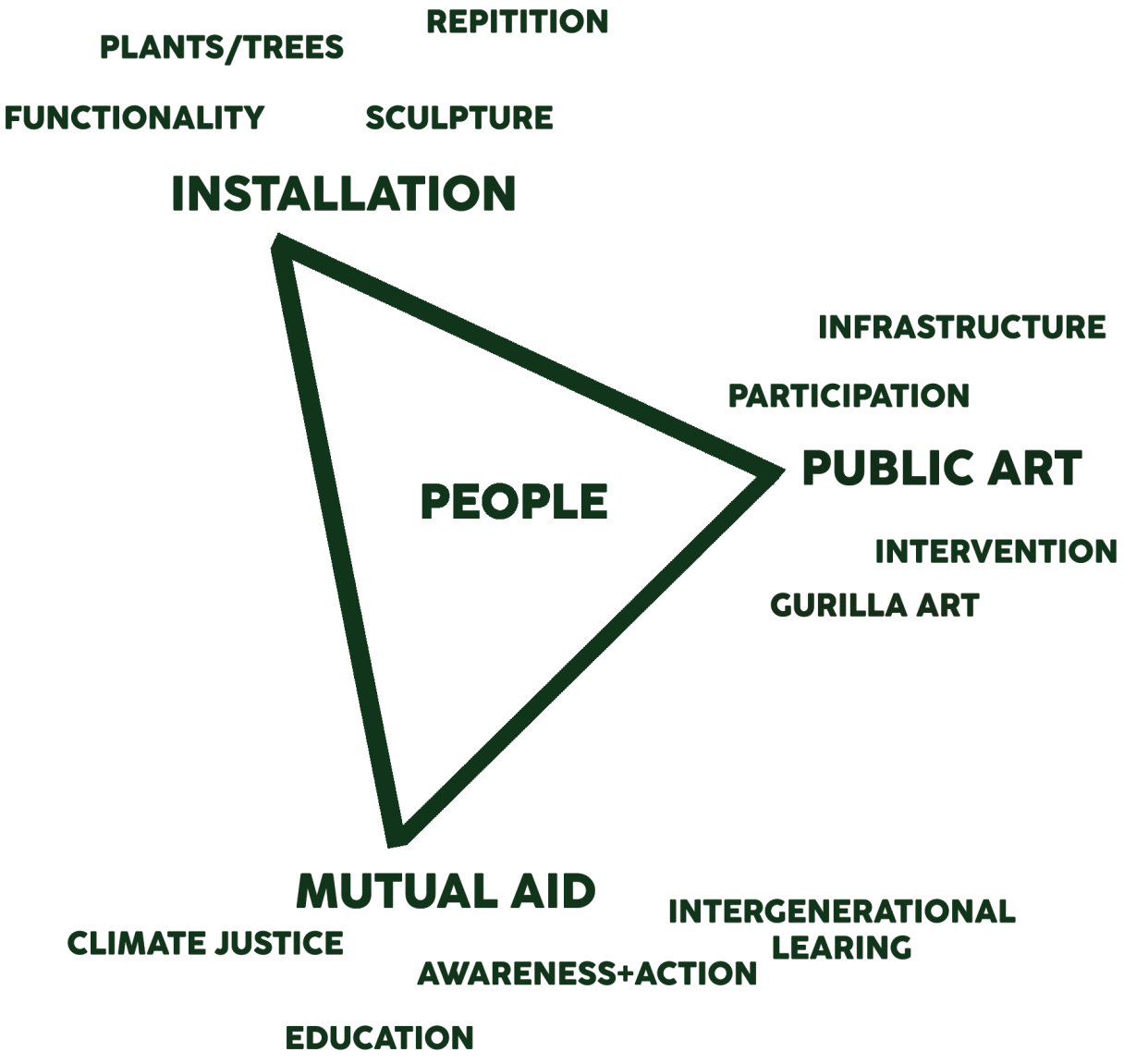
Ground up education is a revolutionary concept that attempts to disrupt the hierarchical structures and limited knowledge channels in traditional education. Drawing inspiration from grassroots movements, which thrive on self-organization and community-driven action, ground up education seeks to foster a culture of shared learning, responsibility, and collective knowledge creation.

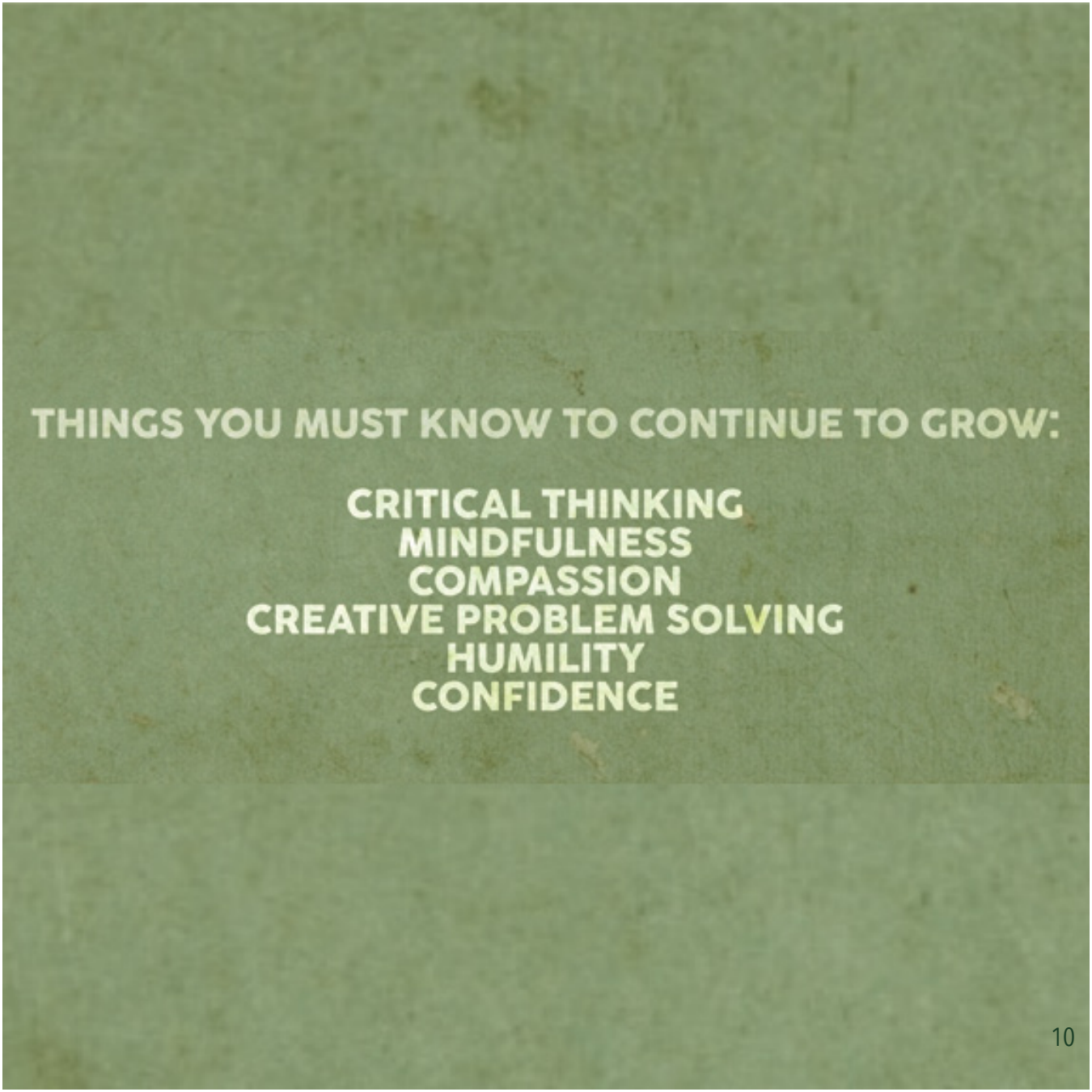
In contrast to the conventional teacher-to-student transmission model; ground up. education champions a decentralized approach, where learning flows not only from the teachers, but also peer to peer, and through self-discovery. In this program teachers assume the role of facilitators, guiding and nurturing student-led exploration and exchange of ideas.

This type of education also transcends the confines of the classroom, recognizing that learning is not confined to institutional spaces. Students are encouraged to take ownership of their education, blurring the boundaries between formal schooling and everyday life. Moreover, this approach acknowledges the unique position of young people as agents of change within their families and communities. We also know that students are often the best teachers of their parents. Young people understand the language their parents speak, the cultural context with which their parents frame their ideas about the world, so young people such an awesome opportunity to introduce new ideas and perspectives into their adult's lives.

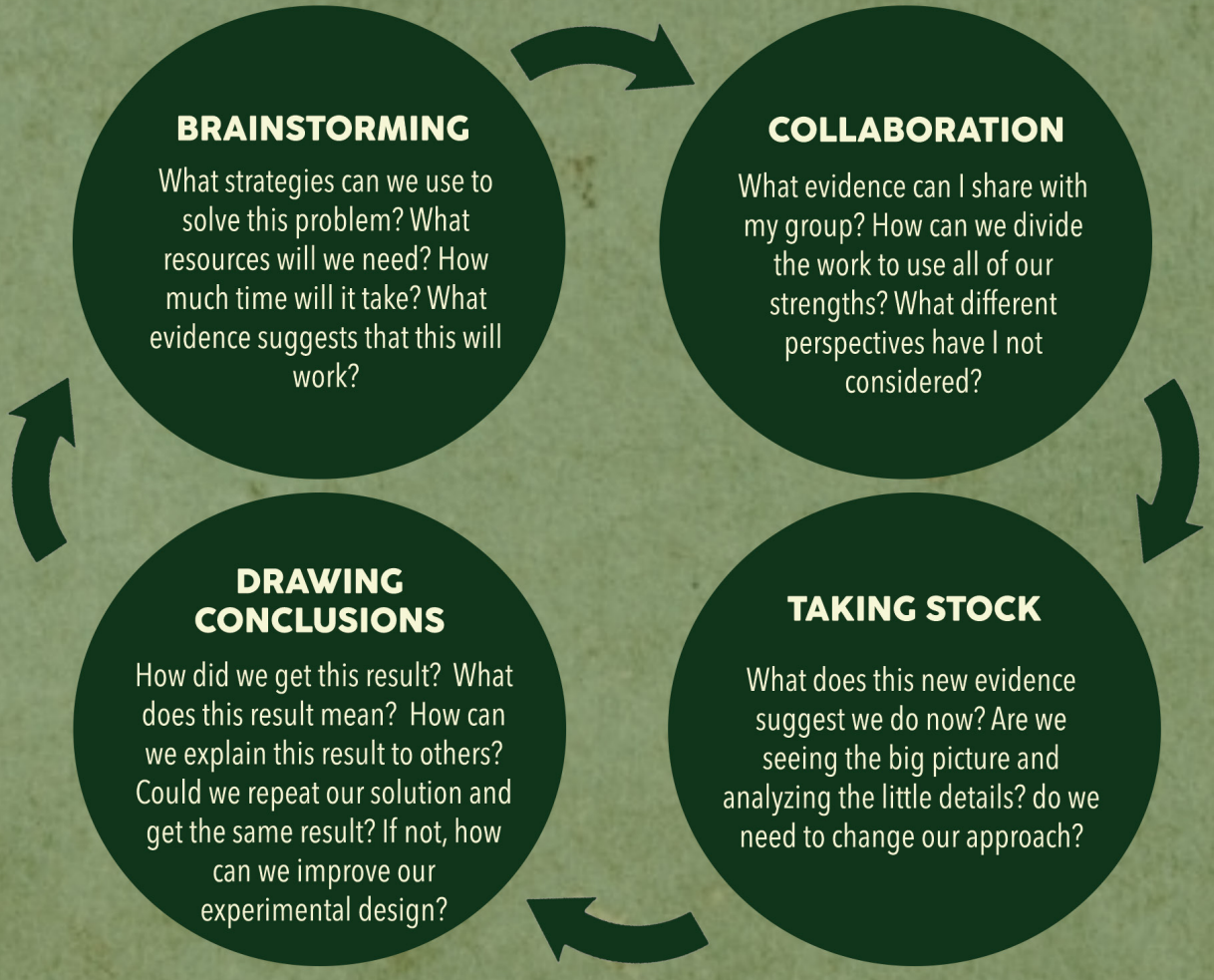
Rooting this program in the principles of ground-up education, we aspire to cultivate a society of lifelong learners-individuals who embrace each day as an opportunity for discovery and creation. Through this transformative approach, we aim to foster a community where the pursuit of knowledge is not just a means to an end, but a continual journey of growth and empowerment.

INITIAL PROJECT MIND MAP




THINGS YOU MUST KNOW TO CONTINUE TO GROW:
CRITICAL THINKING
MINDFULNESS
COMPASSION
CREATIVE PROBLEM SOLVING
HUMILITY
CONFIDENCE

EL EDUCATION – THE DISCOVERY CYCLE



STAKEHOLDERS

Primary Stakeholders: Students; Youth Participants are encouraged to be a part of this program and take on leadership roles amongst their peers.

Secondary Stakeholders: Collaborators; Collaborators consist of local teachers, artists, scientists, environmentalists, fabricators, craftspeople, political organizers, engineers, and architects who are interested in working with students in the program, they sit on panels, give feedback, teach workshops, consult on prototypes throughout the runtime of the program. They are contacted by the facilitators after gauging the students interests for each iteration of the program.

Secondary Stakeholders: Partners; Partners are buisnesses, organizations, government affiliates who are able to provide excess material, space, or sponsorship for the program. These organizations are partnered with before each iteration of the program and would impact the theme and outcomes of that iteration.

SCAFFOLDING FRAMEWORK

THIS PROGRAM IS DESIGNED WITH A FRAMEWORK THAT REFERENCES SCAFFOLDING INTENDED TO BE EASILY CUSTOMIZABLE FOR DIFFERENT GROUPS PROJECTS AND SETTINGS

IDENTIFY SUPPORTS: WHAT ALREADY EXISTS IN THE COMMUNITY? HOW CAN THIS PROJECT PROPEL CURRENT WORK FORWARD? WHAT LOCAL PROFESSIONALS AND ORGANIZATIONS CAN GET INVOLVED? WHAT NETWORKS ALREADY EXIST?

EXPLORE CONNECTION POINTS: READINGS + CASE STUDIES, HOW CAN WE CONNECT THE ART, POLITICAL THEORY, AND REAL LIFE EXPERIENCES TO RESEARCHED EVIDENCE?

DEFINE PARAMETERS: THE CONFINES OF THE PHYSICAL PROJECT STRUCTURALLY AND PEDAGOGICALLY, RESTRICTIONS BASED ON SPACE, TIME, OR EMPLACED BY PARTNER ORGANIZATIONS.

CREATE A FOUNDATION: CLEAR VALUES AND FRAMING QUESTIONS - WHAT DO WE WANT STUDENTS TO LEAVE THIS EXPERIENCE KNOWING? THE FOUNDATION IS A BASELINE THAT LEAVES ROOM FOR CUSTOMIZATION BASED ON SPECIFIC STUDENT INTEREST, BACKGROUND KNOWLEDGE, CULTURAL CONTEXT, AND ACCESS.

KNOW TO GROW PROGRAM TIMELINE

Week 1: INTRODUCTION

CONVERSATION: Introductions, initial discussion about personal experiences regarding climate anxiety, experiences of climate change in the community

RESEARCH: Reading articles focused on specific local issues and broader environmental themes.

SHARE OUT: Framing the project: Is this iteration location specific? Are there any collaborators/sponsors that bring any specific material to the project?

TAKE HOME: Look into some local organizations who are doing interesting climate work. Find some intersections in your personal interest and climate conversations, speak to family and community members. Attend next session with a list of questions and thoughts.

Week 2: BRAINSTORMING

CONVERSTION: How do we want to make decisions as a group?

SHARE OUT: Facilitators bring projects and references based on initial conversations. What questions do we have? What organizations/topics/thoughts did we bring to class? – ideas are kept very broad still.

CONVERSATION: Where do topics overlap/intersect? In that intersection we find our project. Build off of the most interesting intersection – what are our questions? Who can we speak to?

TAKE HOME: Teachers + facilitators contact experts/collaborators/industry professionals to give resources or talk with students.

Week 3: COMMUNITY ASSETS

DEFINING SUCCESS

1. ***FUNCTIONAL IMPACT***: The project results in a tangible intervention that addresses pressing environmental problems in the community.
2. ***TANGIBLE STUDENT TAKEAWAYS***: Students leave with real experience, not only working with peers, but in Environmental Studies, Mathematics, Design Principles, and Public Speaking and more.
3. ***COMMUNITY ENGAGEMENT:*** Success is evident in the level of community engagement and involvement generated by the project. Students take on leadership roles, teaching and involving their peers, parents, and community members. The program becomes a catalyst for intergenerational learning and collaboration.
4. ***PROCESS ORIENTED SUCCESS****:* While the final product is important success is equally rooted in the process of collaborative problem solving. Students reflect on their individual growth and understanding in key areas, their reflections demonstrate a deepened awareness of environmental issues and key values.
5. ***LONG TERM IMPACT:*** Success extends beyond the duration of the project as students continue to be actively involved in environmental advocacy and community work.

POSSIBLE EXAMPLE PROJECTS

*Images Generated by AI

Painted Solar Walkway

Solar energy is sustainable, renewable, and plentiful. It not only enhances the visual landscape, but also harnesses renewable energy, contributing to sustainability efforts and serving as a practical demonstration of clean energy solutions.

Public Shading that Attatches to Existing Infrustructure

Urban Heat islands are a major issue where cities are typically 10 degrees higher than their suburban and rural counterparts. This impacts young, elderly, and unhoused comrades. This issue is largely exhasterbated by the recent heat spikes in the last couple years.

Rainwater Catch Installation

Collecting rainwater is a great way to save energy, to reduce flooding, and support plants and gardens. Often rainwater receipticles are hidden and forgotten, but creating fun, artistic, and eccentric rainwater collection systems brings recognition to the interesting addition.

Community Art Build Street Takeover

Utilizing the streets is absolutely necessary in building community for a neighborhood, meeting your neighbors creates solidarty and commonality. Street art days facilitated by youth focused on expression is essential to celebrating and creating space for joy.

Conversation Pit/Shelter in a Local Garden

Shaded public seating and working areas are pivotal third spaces. Created for use and programming by local organizations, these spaces can be essential meeting areas for neighbors.

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