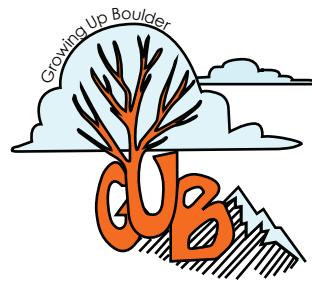


Perceptions of Resilience

Final Report - September 2016



Growing Up Boulder Explores Young People's Ideas of Resilience

In 2014, the City of Boulder was selected to participate in the Rockefeller Foundation's 100 Resilient Cities Initiative. The project aims to help cities around the world to become more resilient to the physical, social, and economic challenges that are a growing part of the 21st century. The initiative will support cities that have experienced natural disasters in exploring and developing strategies around sudden and long-term issues, such as flood, wildfire, disease outbreak, and drought. The City seeks to understand people's perceptions of resilience in Boulder. In collaboration with the City's Resilience staff, Growing Up Boulder (GUB) worked with an economically and ethnically diverse sample of children and youth to develop their own meanings of resilience through art, poetry, and digital presentations by considering the Rockefeller Foundation's definition of resilience: "the capacity to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks [people] experience."

Boulder was the first member of the Rockefeller Foundation's network to engage youth in their processes. We began with a pilot in the spring of 2015 to explore ideas of resilience and to test methods that might yield meaningful conversations and useful information. We continued this work throughout the 2015-16 school year with elementary and high school students. We also collaborated with researchers in Mexico City, also a Resilient City, through a parallel process with children there.

Participants

Participants in Growing Up Boulder's Resilience engagement included:

126 children and youth

- 25 middle and high school students through Youth Services Initiative (YSI is a program of Boulder's Parks and Recreation Department that serves youth from Boulder's public housing sites).
- 10 elementary students from the Kalmia housing site through YSI (spring 2015)
- 6 elementary students through YSI (spring 2016)
- 60 3rd grade students from Whittier International Elementary School
- 25 eight and nine year old children in After School programs in Mexico City, Mexico
- 25 11th grade Advancement Via Individual Determination (AVID) students from Boulder High School

22 University of Colorado (CU) undergraduate Environmental Design Program (ENVD) students

- 8 Designers Without Boundaries students (DWB is an academic scholarship program for first-generation and underrepresented students in the Program in ENVD)
- 14 ENVD planning capstone students

50 participants from the University of Colorado and the Boulder community

- Attended a public lecture by poet Tim M. Hernandez

Common Findings Across Age Groups

Over the course of the year-long Resilience project, common themes for what does and does not support resilience emerged:

Ideas Supporting Resilience

- Friends and family
- Nature and parks
- Pets
- Food (healthy, affordable and enough of it)
- Children and youth taking action

Ideas that don't support Resilience

- Climate change and natural disasters
- death and illness
- Social stress (bullying, peers, cultural exclusion)
- Lack of affordability (housing and food)
- Immigration challenges (deportation, families separated, new language, new customs)
- Unsafe people (people who feel threatening)
- Unsafe spaces (due to crime and/or poor lighting)
- Threatening animals (wildlife and stray dogs)

Common Findings Across Age Groups

For a more detailed look at the findings, young people's recommendations are separated by group:

Group	Age	Ideas Supporting resilience	Ideas that don't support resilience	# of students	Methods used
YSI Elementary School age	5-11	<ul style="list-style-type: none"> • Friends and Family • Nature and pets • Sports • Arts • Food and fruit • Cultural pride 	<ul style="list-style-type: none"> • Dying • Bullying • Animals being hurt • Lack of freedom at school 	10 (Spring 2015) 6 (Spring 2016)	<ul style="list-style-type: none"> • Drawing • Murals • Resilience question ball • Amate bark drawings
YSI Middle and High School age	11-17	<ul style="list-style-type: none"> • Nature • Friends and family 	<ul style="list-style-type: none"> • Housing • Worry about negative global issues portrayed on the news • Feelings of cultural exclusion in Boulder 	25	<ul style="list-style-type: none"> • Drawing • Photovoice • Nested ecologies • Art boxes
Whittier International Elementary School 3rd grade	8-9	<ul style="list-style-type: none"> • Parks, open space, mountains • Friends and family • Caring for animals • Healthy lifestyles (biking, going to the farmers market) • Take care of the homeless in our community • Take action 	<ul style="list-style-type: none"> • Signs of neglect: trash, dog waste, homelessness, stray animals 	60	<ul style="list-style-type: none"> • Drawing • Murals • Video • Asset and vulnerability mapping
Mexico City, Mexico Elementary School age	8-9	<ul style="list-style-type: none"> • Friends and family • Nature and parks • Taking action 	<ul style="list-style-type: none"> • Signs of neglect: trash, dog waste, homelessness, stray animals • Fear of strangers • Unsafe pedestrian options 	25	<ul style="list-style-type: none"> • Drawing • Maps • Asset and vulnerability mapping • Videos
Boulder High School AVID 11th grade	15-16	<ul style="list-style-type: none"> • Boulder's natural settings • Parents sacrificing for their children's well-being • Family, friends, and neighbors • Food at home • Bed • Pets • Teachers & school • Affordable restaurants • Athletic areas and parks • Taking action 	<ul style="list-style-type: none"> • Challenges around immigration • Flood • Death and illness • Stress from parents • Stress from school • Lack of safety in public spaces due to "creepy people" and unit alleys • Lack of security at home • Wildlife • Social anxiety 	25	<ul style="list-style-type: none"> • Asset and Vulnerability Mapping • Digital presentations • Poetry

Project Descriptions

YSI: Elementary School

Spring 2015

Growing Up Boulder used a variety of methods to facilitate conversation with elementary school children in the YSI program, including a resilience “question ball,” drawing, and mural. The resilience ball activity asked children to name happy or sad colors (to be used in the mural), places in Boulder that make them feel safe, places they go when they feel unsafe or uncertain, things that make them feel life is good, or things that make them feel that life is hard. The drawing activity included initial responses to these questions and further development of ideas. The mural pulled all these ideas together. In general, elementary children had more ideas about things that promote happiness and resilience, although they shared some important social issues that do not.

Spring 2016

In the spring of 2016, one of our research partners from Mexico City, Tuline Gülgönen, came to Boulder to share her research with Mexican children about their uses of public space, and to share her resilience research with Growing Up Boulder’s elementary school partners. Mexico City is also a 100 Resilience Cities partner, and our research partners, Drs. Yolanda Corona and Tuline Gülgönen, conducted research in 2015-2016 with 25 children in after-school programs in Mexico City using the same methods as GUB did with Whittier Elementary School. This included discussing assets and vulnerabilities, creating a mural, and producing a video. When Dr. Gülgönen came to Boulder, she shared the Mexico City video with Whittier students, and the Whittier students reflected on what they saw and heard. Dr. Gülgönen also attended a workshop with YSI children to make Amate bark paintings, a Mexican folk art. The YSI children’s paintings included Mexican flags, national colors, and exclamations of “Viva Mexico!” GUB coordinators believe that the connection to Mexico City gave the Boulder children, all of whom were first or second generation Mexican Americans, permission to feel proud of the Mexican aspect of their heritage (see cover photo).



Answering resilience ball questions

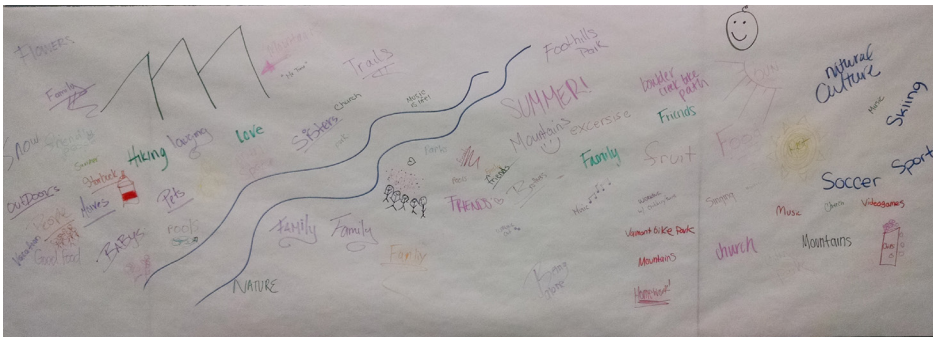


Painting the mural

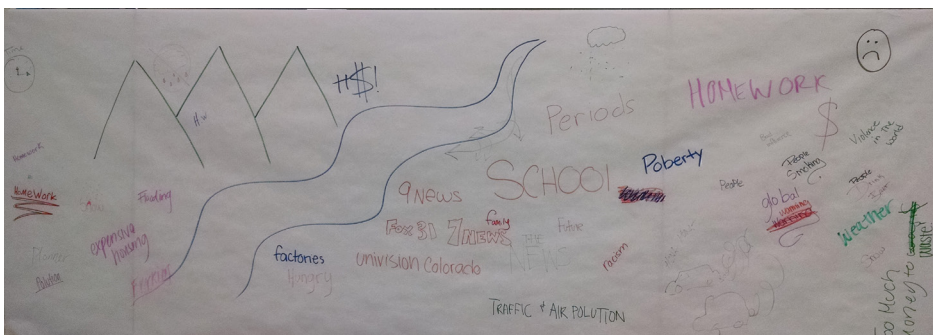
Project Descriptions

YSI: Middle and High School

In spring of 2015, middle and high school students began their exploration of resilience with a drawing activity to identify things and/or places that made them feel resilient/happy or not resilient/sad. Next, they participated in a nested ecology activity where youth marked a physical diagram with happy, neutral or sad faces to show the degree they felt supported and resilient in their homes, schools, neighborhoods and city. Finally, participants worked with a professional photographer to take pictures at home and at their program sites. Many students took pictures of their favorite activities, including skateboarding or enjoying time with friends. Other pictures revealed an appreciation for nature and relaxation shown in images of sunsets, horses, and pets. Youth were encouraged to combine images, words, and colors and create an art box or poster.



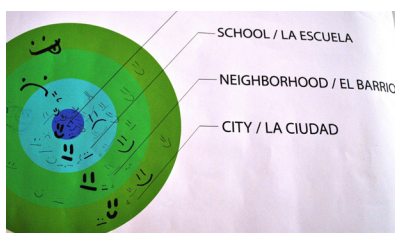
Not Resilient / Unhappy: time, homework, snow/rain/weather, flooding, expensive housing, fracking, pollution, factories, hungry, money, news, family, school, periods, future, traffic, racism, poverty, people, bad influences, global warming, people smoking, violence in the world, people drinking beer, wasting money.



Resilient / Happy: flowers, family, snow, friendly people, outdoors, vacation, people, food, summer, movies, Starbucks, babies, hiking, lounging, pets, pools, Foothills Park, Boulder Creek Path, homework, sun, natural culture, cat, love, open space, nature, mountains, sisters, church, "me time", park, trails, music, friends, brothers, working out, being alone, exercise, fruit, Valmont Bike Park, singing, rest, skiing, sports, soccer, video games, chips.

Drawings of Things that Support Resilience and Happiness (top) and Things that Do Not Support Resilience (bottom)

The nested ecology activity revealed that youth feel most resilient at home or in the city and less resilient in their neighborhoods or at school as shown in the table and image below.



Nested ecology results



Nested ecology activity

	City	Neighborhood	School	Home
😊	9	6	5	9
😐	2	5	7	2
😞		2		

Project Descriptions



"I chose brotherhood, because my friends and family would always have my back no matter what. Boulder has many struggles, but the community has always been there."

-Middle School Student



The image of the lock prompted a conversation about feelings of cultural exclusion. While the intention of the young artist was to represent the security that brotherhood provides him, others in the group thought it reflected feelings of exclusion that they experience in the city because of language and ethnicity.

Ideas came together in meaningful ways in students' final boxes and boards. On the spray painted backgrounds, images and words combined to tell stories about the power of nature and community and the influence of money on the quality of their lives.



"Nature makes me feel relaxed and free from the world.."
- Middle School Student



"Which is more important? Money or nature?"
- Middle School Student



Project Descriptions

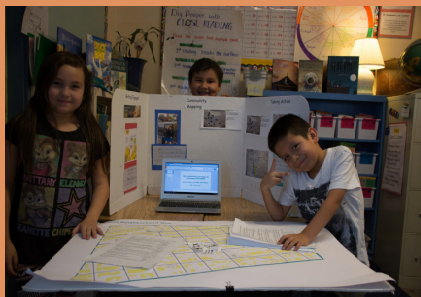
Classroom work: Elementary and High School

For more in-depth research, GUB partnered with three elementary school classrooms and one high school classroom. All groups of students identified assets and vulnerabilities in their community and developed recommendations for how to increase resilience within the city. Students were asked to think about assets and vulnerabilities at their home, school, street, neighborhood, and city scales on two separate days. Assets were defined as a “valuable person, place or thing that helps you feel safe and supported.” Vulnerabilities were defined as “things that make you feel afraid, unsafe, unsure, that make you feel exposed, open to being hurt or that you don’t belong.” After further refining their ideas, children and youth presented their findings and recommendations to adult community leaders.

Whittier International Elementary School, Fall 2015

Approximately 60 3rd grade students from Whittier International Elementary School participated in a series of activities to explore resilience. This included mapping assets and vulnerabilities in their communities, making a mural about resilience, and making a video to exchange ideas with Mexico City children. They also developed recommendations for strengthening the city’s resilience and presented these to city staff, BVSD school leadership, and community members. One of our Mexican collaborators, Tuline Gulgonen, was able to visit their classroom and hear their ideas. She also shared videos from Mexico City’s children and we talked about what they saw as similar and different and what their overall impressions were.

Important values for Boulder elementary school children included parks, open space, mountains, caring for animals, healthy lifestyles (biking, going to the farmer’s market), taking care of the homeless in our community, and taking action.



Project Descriptions

Classroom work: Elementary and High School

Some themes common to both Boulder and Mexico City's 8-9 year old children were:

- Friends, family, support networks, nature, and parks help children feel resilient in both places.
- In both cities, children do not like to see signs of neglect – trash, dog waste, homelessness, and stray animals. There were many insightful discussions about these issues and what in particular they do not like. One girl stated that when she sees people, and children, who are homeless, she realizes that she could be, too. It makes her feel vulnerable – that if these people are not properly cared for, she might not be either.
- In both cities, children believed that one of the best ways to foster resilience was to provide children with opportunities to steward their own communities. We believe this is a very significant finding in that children want these opportunities, yet they do not feel empowered to access these opportunities, or even to know how to start.

One of the Boulder children who watched the Mexico City video responded to the question, "What do you see that you have in common with the children in Mexico City?" with "We are all trying to make the world a better place."

The engagement and dialogue during the Whittier-Mexico exchange day were particularly meaningful to some of the children who are themselves connected to Mexico via family or migration. They were animated, passionate, and insightful. For those children who had never thought much about Mexico City, many learned they had more in common with each other than what they did not.



*Happy/Resilient themes in Boulder:
Nature, Sports, Home, Music, Art*



*Unhappy/Not Resilient themes in Boulder:
Bullies, Death, Guns, School*

Project Descriptions

Boulder High School, 2015-16

Resilience Presentations, Fall 2015

Approximately 25 11th grade Boulder High School Advancement via Individual Determination (AVID is an international program dedicated to closing the achievement gap by preparing all students for college and other postsecondary opportunities) students divided into groups of 3 or 4, and over the course of several class sessions, explored the definition of resilience, examples of resilience in their own lives, and what assets and vulnerabilities they experience in their home, school, neighborhood and city settings. The fall semester culminated with the high school groups presenting a summary of their ideas to community leaders including a school board member, school district administrator, CU's ENVD students, and the City of Boulder's Chief Resilience Officer.

Based on a recurring theme of high school student concerns over lack of perceived safety due to the homeless/transient population around Boulder High School, School Board member Tina Marquis wrote a letter to Boulder City Council in August 2016, requesting that council address this issue. She forwarded the students' resilience presentations to School Board and City Council members.

Resilience Poetry, Spring 2016

Growing Up Boulder worked with the Boulder High School 11th Grade AVID class and undergraduates in the DWB program to continue the Resilience curriculum into the spring semester in a way that was culturally responsive by exploring resilience with Latino poets. Because resilience is such a broad topic that is particularly significant for students of color and first generation students, we wanted to provide a culturally responsive means for students to express their experiences and understanding of what resilience means to them. Renowned Latino poet (and professor) Tim Z. Hernandez co-designed a curriculum to enhance AVID's literacy work in the spring semester. The curriculum included Ekphrastic poetry, digital interactions with Texas Poet Laureate Laurie Ann Guerrero and professor/poet David Campos, and facilitation of a joint workshop between high school and undergraduate students.

In terms of impacts on the AVID students, one student reflected that she liked the poetry project best out of all the resilience work that had been done because, "We had a chance to look back into our lives and have a different perspective, and say, 'Wow, I've been through hell and I'm still standing with my head held high.' " Many AVID students also liked the exchanges with CU students, with one in particular liking when CU capstone students went back to hear what youth wanted to see in their city. Others did not like the topic of resilience so much, nor some of the methods used to understand it; however, several of these same students said they liked the poetry project the most out of all the resilience methods.

The medium of poetry was particularly successful at helping students, both high school and undergraduate, understand resilience from an individual and community perspective. Several CU students integrated issues that AVID students had discussed, such as feelings of safety or acceptance in social spaces, into their university class projects.

Boulder High School Resilience Poem

Boulder High School AVID students created an anonymous poem as part of a workshop with poet and Professor Tim M. Hernandez and Texas Poet Laureate Laurie Ann Guerrero. The students described examples of resilience in their lives, and Professor Hernandez combined their statements into one poem.

Resilience is managing to move forward, even through the darkest night, with only a flashlight guiding you on the path; you anxiously await the light of day.

Resilience is taking the news of the accident and handling everything calmly.

Resilience is my aunt after a flood and evacuation moving, and getting back on her feet.

Resilience is moving from Mexico to give us a better future.

Resilience is my parents working hard to give my brothers and I a better future.

Resilience is my dad moving to the United States when he was only 14 years old. He came alone but managed to make it to the other side.

Resilience is having each other's back, whenever they break down.

Resilience is getting back on the field when I thought I would never be able to go back.

Resilience is having the mindset of an adult when you are only 8 years old.

Resilience is my dad having the courage to learn English to keep his job as a cook.

Resilience is my mom raising her kids on her own and finding a job to support us after my dad was deported.

Resilience is my family's motto. It is what motivates us to keep working hard. Resilience is the key to success.

Resilience is my mom going to work and taking care of my sister and I after having a miscarriage.

Resilience is planning things out for four months and then losing it all in a matter of seconds.

Resilience is my family moving to the US from Mexico, raising 10 kids, learning a new language, adapting to a new culture, building a new "home".

Resilience is coping with the complexity of losing a family member. Jim married my grandma but then lost his life to cancer.

Resilience is my mom coping with the flood all by herself because my dad was out of town.

Boulder High School Resilience Poem

(Continued from previous page)

Resilience is my parents continuing to love and support me unconditionally through a storm of anger and pain; even when I hurt them as well as myself.

Resilience is going to speech therapy every day, working on words and my s's. Resilience is when the going gets tough in Spanish and you keep trying. Resilience is thinking about what I am saying. Resilience is my low muscle tone.

Resilience is my sister and I restarting our lives each time my parents needed to move to a different state. Resilience is making new friends every year for six years in a row. Resilience is letting yourself love even though you've been trained to know it won't last.

Resilience is my mother coming to Colorado at 15 to make a new home. Resilience is my mom having me when she was only 17, leaving my dad's abuse, and taking care of me on her own. Resilience is my mom providing for her family. Resilience is my mom doing my aunt and uncle's homework so she could continue to study. Resilience is my mom going back to school after 17 years to get her high school diploma.

Resilience is my mother taking care of me and my brother for 16 years without my dad. Resilience is my mom, even at her lowest point, being able to pull through for her kids. Resilience is my family handling my grandmother's stroke, learning new ways to act around her and helping her deal with her new life.

Resilience is my sister marrying a US citizen and having to move back to El Salvador for one year in order to obtain her residency.

Resilience is my mom leaving everything behind and moving to the US to give her children a better future in the US. Resilience is my dad losing his job and being unemployed and then finding another job. Resilience is my sister doing badly on a test, but then studying hard for her next test and passing it. Resilience is me recovering from a death in the family.

Resilience is the deafening silence on the other end of the phone when the answer to the question "How did the test go?" is "It's cancer." Resilience is answering, "Would it make you feel better?" to the question, "Would you like some water?" Resilience is not letting the pain defeat your soul or define your existence, however brief your time left is.

Grants and Acknowledgments

Grants

Growing Up Boulder's year-long resilience project was made possible by:

- University of Colorado's Office of Outreach and Engagement
- University of Colorado's Children, Youth and Environments Participatory Research grant for the Boulder-Mexico City exchange
- University of Colorado's Diversity & Excellence grant for the poetry resilience project
- Ongoing general support from: the City of Boulder, University of Colorado, and Boulder Valley School District

Acknowledgments

This work was the result of a team effort by:

- Victoria Derr, Growing Up Boulder and University of Colorado
- Mara Mintzer, Growing Up Boulder and University of Colorado
- Greg Guibert, City of Boulder Resilience
- Lisa O'Brien, Teagan Papke, and Frannie Parkinson, Whittier International Elementary School
- Jennifer Douglas-Larsson, Boulder High School
- Jennifer Fitzpatrick, Corina Garcia, Brad Lautenschlager, and Alexis Moreno, City of Boulder's Youth Services Initiative
- Tuline Gülgönen, Center for Mexican and Central American Studies, Mexico City
- Yolanda Corona, Universidad Autonoma Metropolitana – Xochimilco
- Tim Z. Hernandez, University of Texas, El Paso
- David Campos and Laurie Ann Guerrero, poets
- Sarah Bartosh, Erica Fine, Morgan Huber, JoAnna Mendoza, Lizzeth Romero, Emily Tarantini, Claire Derr, and Cathy Hill, Growing Up Boulder
- Alea Richmond, Designers without Boundaries (DWB), University of Colorado
- Shawhin Roudbari, University of Colorado

This report was produced by Mara Mintzer, Tori Derr, Morgan Huber and Claire Derr in September 2016.