

“Fun, Novel, Safe, and Inclusive”: Children’s Design Recommendations for Playgrounds for All Abilities

**Catherine Hill
Louise Chawla**

*Community Engagement, Design and Research Center, University of Colorado
Boulder, Colorado*

Citation: Hill, C. & Chawla, L. (2019). “Fun, novel, safe, and inclusive”:
Children’s design recommendations for playgrounds of all abilities. *Children,
Youth and Environments*, 29(1), 105-115. Retrieved from
<http://www.jstor.org/action/showPublication?journalCode=chilyoutenvi>

Abstract

This report describes the work of 7- to 8-year-old students in two English Immersion classes in a Boulder, Colorado public school as they collaborated with the city’s Department of Parks and Recreation to develop recommendations to make city playgrounds accessible and attractive to children with different abilities. The report identifies lessons learned from past partnerships to integrate young people’s ideas into urban design that were applied in this project, as well as new insights that emerged. The project’s step-by-step activities are described along with outcomes of the children’s work and reflections of teachers and students.

Keywords: Universal Access Design, playgrounds, Growing Up Boulder, English immersion, children’s participation, play for all abilities, inclusion

Initiating a Process of Inclusive Design

This report tells the story of a project to make the city of Boulder, Colorado inclusive in two senses: inclusive of children's voices in processes of public space design, with a focus on engaging children from immigrant families; and, inclusive by accommodating children of all abilities in city playgrounds. These different aspects of inclusion represent different facets of children's right to participation in their communities according to the United Nations Convention on the Rights of the Child (1989).

The project described here was part of Growing Up Boulder (GUB), an initiative established in 2009 as a formal partnership between the City government, public school district, and University of Colorado Boulder to give children and teens a voice in city planning and design (Derr, Chawla & Mintzer, 2018). The program is anchored in the university's Community Engagement, Design and Research Center, located in the Program in Environmental Design. Each year, city agencies contract with GUB to gather information from young people about their needs and recommendations related to specific city projects. In return, the city covers the salaries of two half-time program staff: a Program Director and an Education Coordinator. They are assisted by undergraduate design interns, who learn processes of participatory design and planning.

One of GUB's operating principles is that at least half of its projects will reach out to children and teens from marginalized populations: low-income residents, immigrants, ethnic minorities, and people with disabilities (Derr, Chawla, Mintzer, Flanders Cushing & Van Vliet--, 2013; Mintzer & Chawla, in press). These groups are least likely to be heard in public meetings. Although Boulder is a politically progressive city, it mirrors the stark economic disparities of the United States. For parents who are working double shifts at low-wage jobs to make ends meet, often with inadequate access to transportation, it is not easy to attend meetings or introduce their children to civic engagement. GUB seeks to show the young people involved and their families that they, too, are valued residents of their city, whose needs and perspectives matter, and to help city agencies find innovative ways to hear from these groups. The project described here engaged 7- to 8-year-olds in two English Immersion classes (also known as classes in English as a Second Language), who spoke Spanish, Korean, Nepalese or Bosnian at home with their families. They were asked to help the city's Department of Parks and Recreation create guidelines for playgrounds for children of all abilities.

Another operating principle that GUB partners have learned over the years is that reaching as many children as possible requires an "affiliate model," with GUB staff passing their expertise in participatory planning and design on to others who work with young people in both school and out-of-school locations. By enabling teachers to assume increasing levels of responsibility for projects, GUB staff develop a corps of trained affiliates who can plan and implement projects with only minimal assistance. At the same time, experienced teachers become catalysts who can help spread information about GUB opportunities to other teachers in their school. The project described here illustrates this principle. Tamar van Vliet, an English Immersion teacher who had done four GUB projects in former years, invited GUB

into her classroom again and partnered with Terri LeRose, another English Immersion teacher, who experienced GUB practices for the first time.

Project Goals and Timeline

Universal Access Design (UAD) is a system of design strategies for indoor and outdoor spaces to ensure accessibility for people of all abilities. In early 2017, the Department of Parks and Recreation approached GUB with the goal of finding children who could help City staff answer two questions: Do the children find UAD concepts important for playgrounds? If so, what UAD features do they prioritize? GUB turned to Tamar van Vliet at Whittier International Elementary School in central Boulder, who was happy to take on this challenge as a service project for her students. She invited Terri LeRose to join her, and they agreed to bring their 11 students together for project activities. The teachers had two main goals for the project: enriching curriculum content and preparing students for lifelong learning and active citizenship.

The English Immersion teachers had already adopted Jane Goodall's Roots and Shoots program as a model for service learning (www.janegoodall.org/our-work/our-approach/roots-shoots). The model organizes service activities under four steps: getting engaged, observing, taking action, and celebration. Applied to the UAD project, the model followed a four-month timeline.

Getting Engaged

In October 2017, this report's first author, who is GUB's Education Coordinator, and Tina Briggs, a planner for the Department of Parks and Recreation, visited the combined English Immersion classes, explained the concept of UAD, and shared the following questions with students:

- What do you want a playground to have?
- What do you need from a playground?
- What should a playground have so that everyone can play?
- Do you believe UAD is an important concept to incorporate in playground design?

Students were eager to investigate these questions.

Once students understood UAD and its purpose, they brainstormed answers to the question, "What should a playground have so that *everyone* can play?" They also worked with a GUB intern to research photos of accessible playgrounds and list what they noticed about different designs. They identified playground elements that they wondered about, and emailed their questions to the Playground Specialist at Recreation Today, a playground equipment company. She wrote back, explaining the purposes of different playground structures.

Observation

Using the information gathered by reviewing UAD concepts, brainstorming ideas, and viewing photos of accessible playgrounds, the students compiled a checklist of design elements to promote "safe," "fun," "novel," and "inclusive" playgrounds for

children of all abilities (their choice of priorities). In November, armed with the checklist and clipboards, they took field trips to evaluate two city playgrounds and their own lower school playground, which was due for renovations. At each site, they took photos of playground equipment through red cardboard frames to signify problematic elements, or green frames when they noticed something safe, fun, novel or inclusive (Figure 1). Back in the classroom, they collated their images on posters showing advantages and disadvantages of the playgrounds visited. They also created a map of their school playground and marked existing safe, fun, novel and inclusive spaces and structures with color-coded stickers.

Figure 1. During field trips to three playgrounds, students applied their Universal Access Design checklist and took pictures of desirable and problematic features



Photo: Catherine Hill

To better understand the needs of people with different abilities, the students wrote letters to invite three people from the city's Center for People with Disabilities to visit their classroom. The speakers talked about their experiences, such as navigating spaces while blind or in a wheelchair. Students also invited a fire lieutenant whose daughter was a wheelchair user, who led a community effort to create an inclusive playground at her school, as well as an older student with Sensory Processing Disorder, and a student who was an avid naturalist. In all cases, these people experienced the environment from distinctly different perspectives.

Taking Action

In early December, the students added guest speakers' suggestions for playground elements to their original checklist. After creating a new enlarged list, they posted it on the wall and used stickers to vote for the ideas they considered most important (see Figure 2). A few days later, Tina Briggs from the Department of Parks and Recreation returned and students reviewed their ideas with her. She discussed advantages and disadvantages of different ideas from the department's perspective. Using her feedback, the students established four main categories of features for an ideal UAD playground, which they shared with the city as recommendations for future playground installations and renovations. The students concluded inclusive playgrounds should provide (see Table 1):

- **Quiet spaces** where children with Sensory Processing Disorder can find a quiet refuge to relax;
- **Nature** where all children can engage in nature play and feel nature's relaxing and calming properties, which is especially useful for children with Sensory Processing Disorder;
- **Accommodating structures** that can provide fun and safe play for children of all abilities; and,
- **Accommodating textures** that promote mobility for children of all abilities

Figure 2. After researching inclusive playgrounds, students listed the elements they would like to incorporate into playgrounds for all abilities and used stickers to vote for the most important ideas



© Lynn M. Lickteig

Photo: Lynn M. Lickteig

Table 1. Children's recommended features for universal access playgrounds

Quiet Space	Nature	Accommodating Structures	Accommodating Textures
<ul style="list-style-type: none"> • A bench to watch from and calm down • Place to relax • Hiding places • Places to lie down • Friend bench/ "buddy bench" 	<ul style="list-style-type: none"> • Trees • Open green spaces • Flowers • Tree trunks to balance on • Tree house • Grass to lie down in • Rocks to climb 	<ul style="list-style-type: none"> • Spin cup (low height and ramp) • Ramps on structures • Low basketball hoop • Slides of different sizes • Bounce buttons for balancing • Bars to hold onto • A 3-D model that describes the playground • Round curbs • Swings with backrest • Monkey bars that all people can reach 	<ul style="list-style-type: none"> • Soft surfaces • Smooth surfaces (no wood chips) • Paved paths to get around (no gravel)

Because their own kindergarten-through-second-grade playground was due for renovations, the students also used these recommendations to organize ideas for their schoolyard. A GUB intern helped them draw a playground plan and then create a 3-D model (Figure 3). A professional photographer volunteered to photograph their model, and an undergraduate design student translated it into a digital plan. The students then wrote letters to their school's principal and Parent Teacher Association, as well as the Parks and Recreation Department, explaining their ideas and why they thought these features should be incorporated into their new school playground.

Figure 3. Students divided their model for an ideal inclusive playground into three spaces: quiet refuge, active play on play structures, and nature play



© Lynn M. Lickteig
Photo: Lynn M. Lickteig

Celebration

In mid-January, after the winter break, students held a "Share-Out" event in their classroom to present their UAD playground ideas to design faculty, school administrators, parents, a city councilor, GUB staff and interns, and City staff, including Tina Briggs. In addition to a PowerPoint presentation, the students had created stations around the room showcasing different stages of their work, with a few students posted at each location to explain what they had done. Visitors circulated from place to place, asking questions. Ultimately, visitors made observations about the children's ideas and the high quality of their work, and each child received a certificate of appreciation for service to the city.

At the end of January, the children presented their ideas again, this time at a schoolwide assembly. One of their ideas was a "buddy bench," where children could sit when they needed a friend to play with, signaling to other children to join them for play. During the assembly, a large object covered with a cloth was unveiled, and there was a bench for this purpose, donated by the organization Resort 2 Kindness! Later, in April, students also had an opportunity to present their ideas to the Parks and Recreation Advisory Board.

Participants' Reflections

The teachers Tamar van Vliet and Terri LeRose each wrote down their UAD project reflections. For Tamar, this fifth GUB project qualified her as a GUB affiliate who could now design and implement a project with minimal GUB staff assistance. As before, she used GUB as an opportunity for service learning and combined it with the Roots and Shoots model. GUB partnerships have enabled her students to connect with people in the community as a source of expertise. In Tamar's view, this was a key success element in all her previous GUB projects and critical for the UAD project. She believed that a project high point was when students met and interviewed people who were excluded from activities that most take for granted. She witnessed a natural sense of empathy evolve among students, along with appreciation for these people's resourcefulness. Students could see for themselves the importance of integrating features for people of all abilities into city designs. Their ideas for taking action flowed naturally from their exploration of this community issue. This kept the project student-centered, with the teachers as facilitators: a sharing of influence that enables students to exercise autonomy and rights (Hart, 1997).

Tamar believed that having people come and talk with the students about how their ideas would be implemented was "incredibly valuable for students so they can see the impact of their work in the long-term and how their ideas directly influence the community." In the UAD project, students experienced being heard during the visits from Tina Briggs and during their presentations to visiting adults, the school assembly, and the Parks and Recreation Advisory Board. The contribution of the buddy bench during the assembly was short-term evidence that their ideas had impact. When renovations to their school playground are completed, they will have opportunities to experience further change. Altogether, the project reinforced Tamar's understandings of the importance of authentic purposes for learning. "Students were engaged in the project throughout," she noted, "because they had a sense of urgency about the importance of their work."

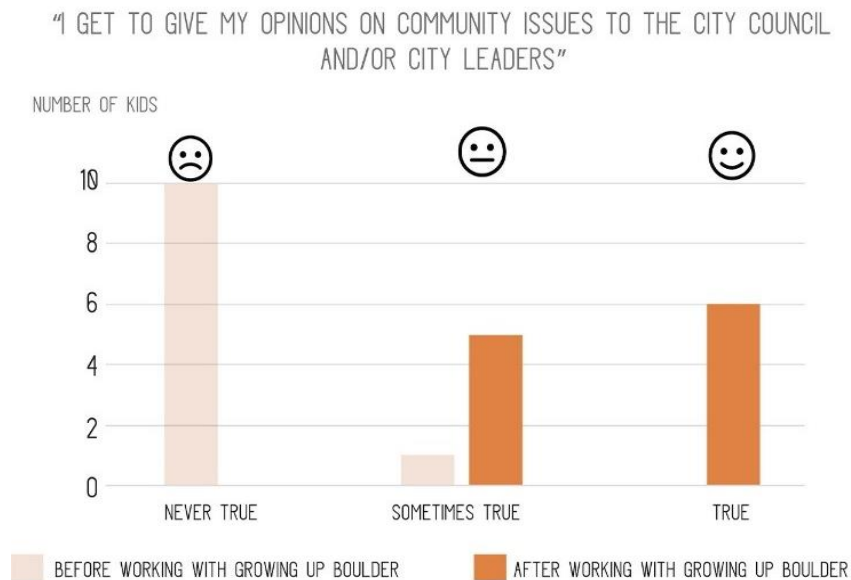
For Terri, the UAD project was the first time she had participated in GUB. Activities that Tamar identified as critical for the project's success were high points for Terri, too. Taking the students into the field to authentically research playground design informed the rest of their work, as did bringing people with disabilities into the classroom. Students prepared questions to ask the visitors, and in Terri's view, student questions "were more poignant and got more to the heart of universal design than the questions teachers wrote." For example, one student asked, "What is it like to be blind?" This showed her the value of inviting the children to lead whenever possible. According to Terri, "This is probably the most important lesson I learned."

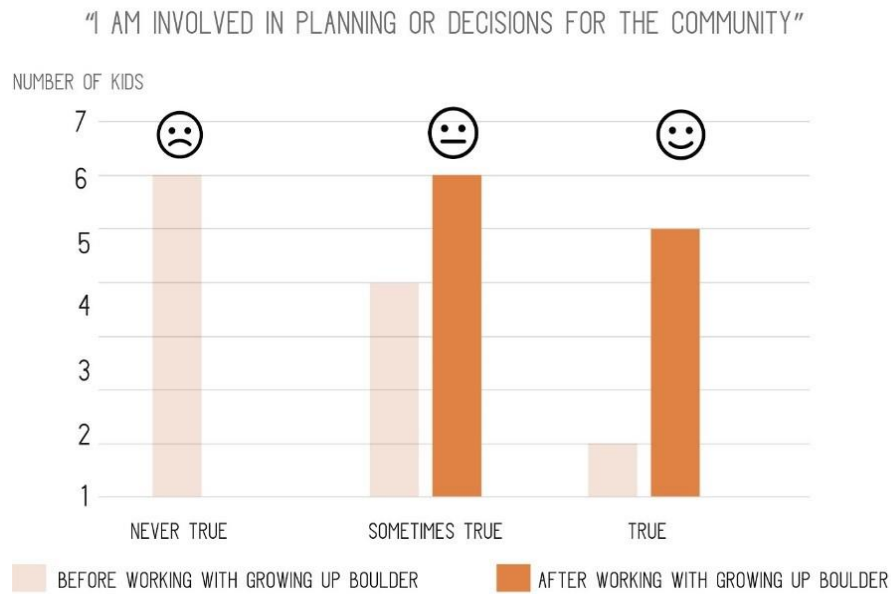
Other high points for Terri were the authentic forums where students shared their learning: the presentation to visitors, their school, and the Parks and Recreation Advisory Board. These events pushed the students to polish their work and overcome nervousness. For her, it was a powerful moment when students stood in front of the advisory board and spoke with confidence. She knew that they and their families often felt marginalized in the community and school, but the project

demonstrated that their ideas were respected and they could impact their world. For Terri, the project changed her as a teacher: "I was deeply moved by the power of this project both as an educator and as a human. I genuinely learned alongside the students. Aside from learning about the importance of inclusive thinking and action, I learned the power of service learning." When students take leadership as they engage with real issues in their community, education shifts from a transmission of information from teacher to student, to everyone working together in processes of human development and active democracy (Schnack, 2008).

GUB asks students to complete brief surveys before and after each project to gauge effects on civic beliefs and intentions. (For more details about this evaluation process, see Derr, Chawla & Mintzer, 2018.) When students were asked afterwards about their involvement in this project, they reported having more empathy for people with disabilities and special needs. The students also showed an increase in their positive perceptions about engagement, with two questions showing especially strong increases. Whereas they began the UAD project with little belief that they could contribute their ideas to community issues, they concluded with much greater confidence that they could be heard (Figure 4.)

Figures 4a and 4b. Surveys that students completed before and after project activities showed especially strong increases related to their confidence in their ability to engage with community issues





Acknowledgments

This report draws on "Growing Up Boulder's Report on Child Involvement in Designing Universal Access Playgrounds," created collaboratively by the Growing Up Boulder Team and Whittier International Elementary School Teachers, February 2018. Available online at <http://www.growingupboulder.org/whittier-uad-playgrounds.html>.

Catherine Hill serves as Growing Up Boulder's Education Coordinator, working with partners to design and facilitate meaningful community engagements and mentoring children, youth and undergraduate interns. In 2015, she retired from teaching after 32 years in elementary school classrooms.

Louise Chawla is Professor Emerita in the Program in Environmental Design in the University of Colorado Boulder. She remains active with the program's Community Engagement, Design and Research Center, including projects for Growing Up Boulder, which she helped establish.

Relevant Websites

- Child Friendly Cities Initiative of UNICEF: <https://childfriendlycities.org>
- Growing Up Boulder: www.growingupboulder.org
- Roots and Shoots: www.janegoodall.org/our-work/our-approach/roots-shoots
- Universal Access Design for playgrounds: www.ncaonline.org/resources/articles/playground-universaldesign.shtml

References

- Derr, V., Chawla, L., & Mintzer, M. (2018). *Placemaking with children and youth: Participatory practices for planning sustainable communities*. New York: New Village Press.
- Derr, V., Chawla, L., Mintzer, M., Flanders Cushing, D., & van Vliet--, W. (2013). A city for all citizens: Integrating children and youth from marginalized populations into city planning, *Buildings*, 3(3), 482-505.
<https://doi.org/10.3390/buildings3030482>
- Hart, R. (1997). *Children's participation*. London: Earthscan Publications.
- Mintzer, M., & Chawla, L. (in press). Turning young people's ideas into action: Learning from long-term partnerships for child and youth participation. In J. Loebach, S. Little, A. Cox & P. Eubanks Owens (Eds.), *Routledge handbook of designing public spaces for young people*. Abingdon, UK: Routledge.
- Schnack, K. (2008). Participation, education, and democracy. In A. Reid, B. B. Jensen, Nickel, J., & Simovska, V. (Eds.), *Participation and learning* (pp. 181-196). Guildford, UK: Springer.