Honoring Voices, Inspiring Futures: Young People’s Engagement in Open Space Planning

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Abstract
Growing Up Boulder—a child- and youth-friendly city initiative in Boulder, Colorado, USA—engaged 95 children, ages 4-17, in a planning process with the City of Boulder’s Open Space and Mountain Parks (OSMP) department. The goal was to understand current uses of the North Trail Study Area and to identify strategies to improve visitor experiences for the 7,700-acre study area. This report describes specific methods of engagement, outcomes of the engagement, and reflections on the process. Youth perspectives led to concrete changes to the plan and to organizational shifts within OSMP, allowing for greater youth engagement in the future.

Keywords: children and youth, participatory research, environmental planning, urban planning, civic engagement
Introduction
Growing Up Boulder (GUB) is a child- and youth-friendly city initiative established in 2009 as a formal partnership between the City of Boulder, Boulder Valley School District, and the University of Colorado’s Program in Environmental Design. The work of GUB is underpinned by the principles set forth in the United Nations Convention on the Rights of the Child (UNICEF, 2013), which establishes children’s rights to safe and clean environments, basic health services, education, places to gather and play, and to participation in community planning and decision-making (Chawla, 2002; Malone, 2006). Over the past seven years, GUB has supported child and youth participation in a variety of planning initiatives including neighborhood and public space planning, transportation planning, and park design.

In 2015, GUB began working with the City of Boulder’s Open Space and Mountain Parks (OSMP) to engage children and youth in their North Trail Study Area (North TSA) planning process. The North TSA encompasses 7,700 acres of diverse ecological landscapes, farming and ranching activities, and cultural resources from Boulder’s early inhabitants and settlers. The area provides popular recreation areas, such as Wonderland Lake (Figure 1), the Foothills Trail corridor, and Boulder Valley Ranch, as well as less visited locations (Figure 2) such as Lefthand and Hogback Ridge Trails. The overall purpose of the North TSA planning process was to describe strategies and actions for improving visitor experiences and increase the physical and environmental sustainability of trails and visitor infrastructure while conserving natural, cultural, and agricultural resources. The planning process included identification of issues and interests, scenario development, and review of the draft plan by the community and governing bodies. GUB and OSMP saw this planning process as an opportunity to explore how child and youth engagement might support OSMP planning initiatives.

Figure 1. The North TSA, near Wonderland Lake

Image Credit: Phillip Yates, OSMP
In this paper, we present the approach and methods used to engage children and youth in the planning process and reflect on the impacts and value of that engagement. In our reflections, we identify influences on children and youth, their contributions to the plan itself, and internal shifts within OSMP for greater support of and longer-term integration of child and youth engagement.

**Methods of Engagement**

For the North TSA planning project, GUB engaged children aged 4-17 in participatory activities held at one of the trailheads within the North TSA. Participants included 10 children (ages 4-5) from Boulder Journey School; 25 children (ages 3-17) from approximately 20 families who participated in a Family Day event; 60 Junior Rangers (ages 14-17); and 10 Crew Leaders employed by OSMP as part of their Junior Ranger Program. Our goals were to experiment with a variety of engagement approaches with a range of age groups, capitalizing on established partnerships between GUB and the Boulder Journey School and existing OSMP programs, such as nature education and the Junior Ranger program. We tailored specific methods to the ages and format of engagement as follows.

**Boulder Journey School**

Based in the philosophy of Reggio Emilia, Boulder Journey School honors children’s own modes of expression and promotes children’s right to active citizenship (Hall & Rudkin, 2011). For many years, the Boulder Journey School has been an active partner in in GUB child engagement projects.

Over much of the 2014-2015 academic year, preschool students at Boulder Journey School explored insects as a major theme of study. Students explored their
outdoor playground, finding praying mantises, butterflies, and spiders. They also took field trips and researched insect body parts. They applied this research to their design of costumes that mimicked insect body parts and colors, “so as not to scare the bugs” (Figure 3) (Derr, Chawla, & Pevec, 2017).

**Figure 3.** Children researched, designed, and wore bug costumes so that they would look more like them and potentially be less threatening to the bugs, as in this child at a field trip to a city lake

![Image Credit: Boulder Journey School](image)

In July of 2015, during the North TSA planning process, the preschool students visited Wonderland Lake on the North TSA to look for insects and learn about insect biology from OSMP staff. At the end of the trip, OSMP and GUB staff facilitated a conversation with the Boulder Journey School children, who shared what they liked and offered their recommendations for improving Wonderland Lake.

**Family Day**  
GUB and OSMP staff organized a Family Day at Wonderland Lake to gather input about children and families’ interests or concerns in the North TSA. The event was planned in coordination with education staff from OSMP and Boulder Journey School and was advertised through news media, GUB partner networks, a family nature network, and two neighborhood social media sites. Approximately 20 families with children aged 3-17 attended the Family Day. Some trail visitors also attended the event.
On Family Day, interpretation staff from OSMP set up an outdoor station for visitors to learn about special natural features of the North TSA, including the spectacular wildlife of the area, including ring-tailed cats, Northern Harriers, mountain lions, and threatened butterflies, as well as clam fossils which provide evidence of the ancient sea that once covered the area.

GUB and OSMP planning and Junior Ranger staff also set up indoor stations for children and families to share their ideas for the North TSA plan. The “Draw your Vision” station provided a template with the prompt, “I would like to see __________ in the North TSA because ____________.” To help planners formulate potential changes in the study area, this exercise was meant to understand the resources, opportunities, and activities that children might like to experience. In keeping with the community-wide planning process, the exercise was also intended to uncover the reasons why these changes were desired.

The “keep, change, or add” station provided maps of the North TSA with color-coded sticky dots to indicate what visitors would like to keep (green), change (red) or add (blue) to the area. Participants could also add additional comments about why they wanted to “keep, change, or add” features to the area. Many comments came from parents or other adult visitors, but the GUB and OSMP staff also worked to facilitate the contributions of children. To facilitate, staff asked detailed questions to clarify why children liked an area or specifically how they would change a place. Staff also informally generated questions such as, “What do you like about it?” “What do you do there?” “How would you make it better?” and helped children write these ideas down. Facilitation was important in understanding why children liked or wanted change in an area so that planners could directly address children’s goals and interests for a specific place.

The Junior Ranger Program
The OSMP Junior Ranger Program employs teenagers, aged 14-17, for summer service on OSMP lands. This local youth corps has included teens in priority natural resource management projects since 1965 (City of Boulder, 2016). The youth corps curriculum joins service, learning and strong team environments to support individual and group achievement. Dialogue, consensus, and motivation are key tools in the process. Through their service, Junior Rangers build an awareness and appreciation for open space and the process behind resource management issues and decision making. Junior Rangers often discover that environmental planning is rarely “black and white,” but instead requires thoughtful negotiations and compromises. Junior Rangers learn to honor each other’s voices, regardless of differences in opinion. Thus, Junior Rangers were well-positioned to hear and reflect on multiple perspectives related to the North TSA planning process.

GUB worked with two Junior Ranger crews (one each in June and July) for a six-hour workshop. At the beginning of the workshop, GUB and OSMP staff introduced the planning process, the importance of child and youth participation in this process, and the methods of photovoice and co-design that would be used to explore Junior Rangers’ perspectives on the North TSA plan.
Photovoice is a method developed by public health and urban planning disciplines to assess strengths or concerns about one's community and to communicate these ideas both visually and verbally with policy makers, city leaders, or researchers (Derr, Chawla, Mintzer, Cushing, & van Vliet---, 2013). In this photovoice process, Junior Rangers walked around Wonderland Lake for about 40 minutes, took pictures with cameras and frames (Figure 4), and recorded on a field note sheet why they took each picture. The youth identified aspects of the North TSA that they liked (green frames, Figure 5) or did not like (red frames, Figure 6). Each group then shared their pictures on a projector and explained the significance of each image. A facilitator recorded the main ideas represented in each image, placing check marks next to concepts that were repeated by more than one group.

**Figure 4. Junior Rangers implementing photovoice method**
Figure 5. Photovoice, framed with green, to represent aspects of open space Junior Rangers liked: “Diverse habitat on trail is good and makes hiking more interesting.”

Image Credit: Junior Rangers Crew 2

Figure 6. Photovoice, framed with red, to represent aspects of open space Junior Rangers did not like: “There should be paths down to the lake so hikers don’t make their own trails.”

Image Credit: Junior Rangers Crew 2
Junior Rangers also developed an ideal vision for the North TSA through a facilitated co-design method (King, Conley, Latimer, & Ferrari, 1989). In this process, Junior Rangers were asked to close their eyes and to visualize the following: “When Open Space is just the way you envision it should be, what does it look like? What would an ideal day look like for you in Open Space? What are you doing? What are you seeing? What do you smell or hear? Who are you with? Who else is sharing the space with you? Are there any plants or animals that you see?” For each session, a trained graphic facilitator illustrated the Junior Rangers’ ideas.

After the photovoice and co-design processes, facilitators asked Junior Rangers to generate recommendations for the planning process. These recommendations had emerged naturally as youth discussed their ideals and analysis. Youth discussed recommendations as they were recorded on a white board, and shared varying perspectives on the specifics of a recommendation. Once all youth recommendations were recorded, Junior Rangers were given three small stickers. They were asked to place the stickers next to their top three recommendations. The three choices were not ranked, but indicated collective priorities.

To gather further input from other Junior Rangers, GUB then shared the outcomes of the workshop with three additional Junior Ranger Crews who responded to previous crew members’ ideas and developed their own recommendations. These workshops were about one hour each. After hearing previous crews’ ideas, and discussing these ideas amongst themselves, each crew member was given a set of three stickers and asked to mark their top three priorities for the North TSA.

**Results of Engagement**
Young people’s desires for the North TSA fell into four categories: direct experience with nature, nature protection; nature interpretation and education, and broader city planning issues. These are described briefly here and in more detail elsewhere (see Growing Up Boulder, 2015):

**Direct experience with nature**
Children and youth of all ages spoke about a desire for more opportunities to interact with and access nature, such as through boardwalks, trails, or bridges. Children at the Family Day wanted increased access to nature for interactive and tactile experiences so that they could view wildlife, play with sand, touch the water, get their feet wet, and peer into the shallows for tadpoles. Two 3-year-olds described their desires this way: “I would like places to play in sand and water,” and “I would like to see more butterflies, because I like them and I like catching them.” Children at the Family Day also said they would like better water access at specific locations in the North TSA that have creeks. In the visualization exercise, Junior Rangers described a range of desirable activities, from hiking alone in remote areas, to “hammocking” with friends, or picnicking with family (Figure 7).

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1 Hammocking was a new term to the authors. Junior Rangers explained that hammocking involves a group of friends taking portable hammocks along on a hike: Young people hike to desirable resting places, hang their hammocks, listen to music, and relax with friends before moving on to the next site.
Figure 7. Visioning drawing showing various “ideal days” in open space, from remote hiking to biking and hammocking

Illustration Credit: Deryn Wagner

Nature Protection
Concerns about recreation and nature protection\(^2\) emerged from all groups. Preschool students expressed genuine concern about how insects might be stepped on or their habitats damaged by visitors to the North TSA: “We want to protect the bugs...” “And live with them!” Children and parents at the Family Day expressed a desire for greater protection of native plants in specific North TSA areas. Junior Rangers also expressed concern about various issues related to nature protection including recreational carrying capacity and off-leash dog policies. In the photovoice activity, one Junior Ranger stated, “there are too many people on the trails which makes them hard to walk on in this area.” In developing recommendations for off-leash dog policies, another Junior Ranger suggested that “there needs to be more education about the impacts of dogs on wildlife so people understand why policies are in place.”

\(^2\) As a department, OSMP uses the term conservation for open space planning and management. However, children and youth consistently used the word protection. To honor and most accurately reflect their ideas, we use the term nature protection here for young people’s interests. We use conservation and resource management when referring to open space goals.
Nature Interpretation and Education
One of the most popular ideas among Junior Rangers was for a comprehensive map, similar to a ski resort map, that could be made available at trailheads\(^3\) for education about trails, natural history, safety awareness, and “sleuthing.”\(^4\) Junior Rangers were divided fairly evenly as to whether the map should be a paper, take-along map, or a digital application. Some felt that they already spent too much time with technology, while others thought the digital form would save paper and allow for greater breadth and depth of natural history information.

Broader City Planning Issues
In the engagement processes, children, youth, families, and teachers all spoke about aspects of the city beyond the North TSA and the spaces administered by OSMP. These included a desire for housing colors and designs that were more consistent with the Wildland Urban Interface; safe road crossings and easily accessible public transportation to the all trailheads (including and beyond the North TSA); sufficient car and bike parking at trailheads; and a desire for parks and playgrounds that are designed for teenagers.

Planning Integration
The process and results of the engagement activities were compiled into a final report that could be shared with all OSMP staff, board members, and the general public to increase communication about young people’s ideas and to inform the plan (Growing Up Boulder, 2015). The timing was such that OSMP staff were able to incorporate the ideas into draft planning scenarios so that the Open Space Board of Trustees, the Boulder City Council, and the wider public could consider the ideas of children and youth as they critiqued these scenarios. The draft plan included a number of visitor improvements that came directly from children and youth who participated in this process.

As the draft plan was developed, OSMP and GUB staff developed a letter to communicate back to the children, youth, and families how their ideas were taken into account. This letter was mailed to all participants. The letter included a table with the headings: “Ideas from Young People” and “Translation into Draft Scenarios,” as in Table 1. The letter included a total of 11 distinct ideas from children and youth that were integrated into the draft scenarios.

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\(^3\) A trailhead is the location where a trail begins. A trailhead typically includes parking and signage with trail maps, educational materials, and any policies, wildlife warnings or restricted areas.

\(^4\) Sleuthing is a term used in nature education for a process in which children search for nature clues, as a detective might, as a way to learn more about the environment. Here Junior Rangers envisioned a take-along activity in which children would search for clues to learn about the North TSA and its natural or cultural history.
Table 1. Excerpt from letter communicating how young people’s ideas were considered

<table>
<thead>
<tr>
<th>Ideas from Young People</th>
<th>Translation to Draft Scenarios</th>
</tr>
</thead>
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| More opportunities for interaction with water, like enhanced lake access, sand play, boardwalks and clear trail access | All scenarios for Wonderland Lake would:  
• Build a pier for fishing and wildlife viewing,  
• Add two gathering areas in the shade by the waterfront, and  
• Improve primary beach access on the peninsula.  
In addition, one scenario also considers enhancing access into the cattail marsh in Wonderland Lake, maybe with a floating pier.  
In all scenarios, water access would also be provided at the Fourmile Canyon Creek Bridge and Boulder Valley Ranch pond. |

Many of the ideas from children and youth made their way into the final plan, which was approved by the Boulder City Council in June 2016. Numerous recommendations for improvements at Wonderland Lake came directly from young people and would likely not have been included in the plan in the absence of a robust youth engagement process (Figure 8). Specifically, the final plan included physical and regulatory improvements, which responded to the young people’s desire for more direct and tactile engagement with nature and a balance between recreation and nature protection.

Figure 8. Lasting youth impact on wonderland lake

Image Credit: OSMP
Reflections on the Process

Reflections of Children and Youth
At the end of their workshops and through notes and newsletters (Figure 9), the Junior Rangers expressed their appreciation of the opportunity to have their voices heard by city planners and leadership.

Figure 9. A thank you card written by Junior Rangers after their workshop

![Thank you card](image)

One crew took a full newsletter page to collaboratively describe their reflections, as in the following excerpt:

... We felt honored that they came to us and gave us a chance to participate in the decision making process at such a young age... It was nice to have a day to think and reflect... while you knew you were contributing to something real. We learned how much time, detail, and effort goes into the planning process and took an active role discussing our recommendations for the North TSA... We felt like our voices were being heard (OSMP, 2015, p. 2, emphasis added).

These sentiments affirm previous participatory planning research (Chawla, 2002; Derr & Kovács, 2015): youth want to be heard and respected and they want to contribute to “something real.” From a planning perspective, it was also important that youth specifically spoke about the “time, detail, and effort” that goes into a
planning process. Many city planners in Boulder have expressed that they wished that adults also had these opportunities, to increase productive and positive dialogue at community engagement events (Derr & Kovács, 2015). Finally, like youth in other participatory studies (e.g., Chawla, 2009; Hart, 2014), Junior Rangers also valued some of the intangible aspects of the process such as opportunities for dialogue with adults and each other, where facilitators are open to hearing from youth and see them as having something valuable to say (OSMP, 2015).

**Reflections of OSMP Staff**

Prior to this engagement process, some staff were unsure whether young people’s engagement would yield anything of value. However, young people’s realistic and practical suggestions helped OSMP staff and board members see that children and youth do have perspectives that can directly impact the planning process in positive and productive ways. This has led to shifts within OSMP including changes in individuals’ perspectives about the value of children and youth engagement, changes in adult perspectives about young people’s attitudes toward open space conservation, and organizational shifts in how community and youth engagement will be structured in the future.

**The Value of Young People’s Engagement**

Many OSMP staff and board members valued the concrete contributions of children and youth to the planning process. Planners were able to include specific physical elements recommended by young people into the North TSA plan, such as shade structures and locations for creek access. They were also able to address young people’s desire for fishing, natural history education, and nature protection. Young people’s ideas have also generated future engagement plans for child-friendly interpretive exhibits, nature play, and community rangers.

Through the process, OSMP staff saw first-hand the value that young people can bring to planning processes. This was expressed in an internal presentation with digital slides developed by the environmental planner associated with the project. In response to the question, “What did we learn about engaging Junior Rangers in planning?” she developed a bulleted list that included: “they care,” “they think expansively,” and “they can dialogue well.” Because this was an exploratory engagement process for OSMP, it is particularly significant that the slide ended with “[we learned that...] we want to engage them more often!”

**Young People’s Values for Nature**

The engagement process also affirmed young people’s values for protection and stewardship of nature. The Junior Rangers were a self-selected group of young people, who through their choice of employment, have identified nature stewardship as important. However, these values were also shared by Boulder Journey School students and the guests at Family Day. According to the OSMP Director, this outcome was significant: “This approach accomplished both engaging people new to the process and engaging youth in a conversation about the importance and challenges in managing natural lands” (Winfree, personal communication).
The Director also reflected that adult participation was changed by the presence of youth. She saw important shifts in the attitudes of community leaders, who moved from a conflict orientation\(^5\) to appreciation and hopefulness when youth were engaged. One board member had lamented prior to the GUB engagement process that “young people do not care about open space values,” but became much more positive upon hearing youth voices from the community.

**Longer-Term Organizational Shifts**  
According to the Junior Ranger Program Coordinator, the investment in the GUB-OSMP partnership has brought new vocabulary to OSMP staff. The Junior Ranger program had been operating successfully at OSMP for many years, but had not previously been involved in the planning processes. As described by the Program Coordinator, “The GUB engagement process brought a new opportunity to OSMP. Staff can see youth not only as part of the community, but also as valuable contributors to decision making. Our systems can and should include youth.” OSMP staff look forward to the contributions of youth and the Junior Ranger program. In 2016, Junior Rangers presented their ideas on service and stewardship at both departmental all-staff and Open Space Board of Trustee meetings. After the all-staff meeting, the Director of OSMP wrote to the Junior Ranger Program Coordinator that, “I have great hope for the future, as I see the leadership, work ethic, and service qualities emanating from these individuals” (Winfree, personal communication).

OSMP planners are building on these successes to incorporate youth engagement into an upcoming departmental master plan process. Engagement for the master plan may include youth-focused efforts such as focus groups, surveys, and hands-on activities to understand how young people see the future of their public lands. Not only do OSMP staff want to integrate young people into more of their planning processes, they also want to consider how to include them in more than just the public engagement aspects of a planning process. For example, OSMP is exploring possibilities for more youth involvement in volunteer projects and other operations. They also want to consider more ways to communicate back to children and youth how their ideas have made a difference.

**Reflections of GUB and OSMP Facilitators**  
The North TSA engagement process solidified the relationship between GUB and OSMP, fostered multiple modes of creative expression, and provided a structure for engagement that met partner needs, timelines, and interests. Over many years, GUB has found these to be critical components of its outreach with children and youth.

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\(^5\) City planners often interact with community members who advocate for a single position; this can create perspectives that people within the community are conflict-oriented rather than community-oriented, and in this case, had shaded community leaders’ perspectives about the community as a whole.
In reflecting on our process, we wish we could have provided more time with the Junior Rangers crew members so that we could educate them about special features, issues, and ecological concerns specific to the North TSA. Crew members expressed concern for conservation and preservation of open space, but there was not always enough time for in-depth dialogue or for them to build expertise and refine their recommendations based on deepened knowledge. This is an important part of GUB’s process: recognizing young people’s expertise, helping to deepen their knowledge, and then providing opportunities to make and discuss recommendations.

Finally, GUB typically partners with schools or youth-serving organizations to bring perspectives from some of Boulder’s least-heard children and youth, such as those from lower-income or Latino families (Derr et al., 2013). Because of the timing of engagement in this process, we did not have the means to accomplish this for the North TSA process. Future engagement might find ways to partner with existing OSMP work that targets this population as well.

**Conclusion**

Young people have the potential to transform participatory processes: young people in GUB’s projects have consistently demonstrated care—for inclusive spaces; for people of all ages, abilities, and ethnicities; and for the natural world (Derr et al., 2017; Derr & Tarantini, 2016; Derr et al., 2013). Young people’s thoughtful and caring attitudes inspire “hope for the future” for city planners and leadership, and a desire to support positive change. OSMP staff have come to see the potential of young people—their leadership, desire for service, and skills in communicating—that are fostered through programs such as the OSMP Junior Rangers and Boulder Journey School. It has been GUB’s experience that “seeing is believing” (Mintzer & Cushing, 2016) in youth participation: a successful participatory process can help even skeptical leadership imagine a positive future, when seen through the eyes of young people.

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architecture and planning from the University of Colorado Denver, where she received her first taste of youth engagement in the Learning Landscapes schoolyard renovation project.

References


