Parents for Joy is a group of parents and families of children with special needs in and around the small town of Atascadero, California. The group is working on designing and building a playground that accommodates the needs of their loved ones. This playground will have features that are accessible to people of all degrees of mobility and agility, and that promotes safety and inclusivity. Mission Statement: On their website, Parents for Joy provides the following mission statement: “Parents For Joy is a group of parents, families, and friends living in and around the small town of Atascadero, who have children with special needs. Our community is in need of a playground that will enhance the safety and involvement of children with special needs such as Autism and Spectrum Disorders, Sensory Processing Disorders, Down Syndrome, Cerebral Palsy and Visual Impairment, just to name a few. Our vision is to one day see our children playing together with other children, raising awareness, and building friendships. And, of course, having fun! This playground isn’t just for children with special needs, it’s for everyBODY!”

Key Words: Parents for Joy, Joy Playground, Atascadero, Disabilities, Volunteer

Introduction

In April of 2018, I was presented the opportunity to help manage the construction of Joy Park Playground. Phil Barlow, a Construction Management professor at California Polytechnic State University San Luis Obispo, passed on an email sent by Kate M. Auslen who is a Personnel Analyst in the College of Architecture and Environmental Design also at California Polytechnic State University San Luis Obispo. I was eager to jump on board and was promptly put in contact with the general contractor of the project, Taylor Hamil. He volunteered his time to help construct and manage the building of Joy Playground. In addition to myself, Harrison Tucker, a Cal Poly Construction Management Student, was also excited to volunteer his time and we agreed this was a great cause.

The work broke down into different responsibilities that Harrison and I equally distributed amongst ourselves. I was set in charge of the budgeting and subcontractors’ contracts, while Harrison was in charge of the schedule and the subcontractors’ durations. The two of us shared daily reports and progress photo responsibilities and would often visit the site together to check on updates. Together, we worked for almost a year on this project and overcame many challenges.

Harrison Tucker, Taylor Hamil, local volunteers, and I attended the ground breaking ceremony on May 1, 2018. The ceremony was full of excitement and joy as many of the residents and volunteers looked forward to seeing their hard work pay off. A local group of dedicated community members called Parents for Joy, worked tirelessly for nearly five years to raise funds for the all-inclusive playground. The playground included amenities for children with special needs and different abilities. Many of the families had children with disabilities and on top of taking care of them, Parents for Joy made strides in raising money and support for the project. After many years of fundraising and community involvement, the local group raised nearly $1,000,000 to fund the construction of the playground. The park was completed on April 4, 2019 and many people from all around the area attended the ground opening on April 5, 2019.

When I was informed of the project, Parents for Joy had reached their fundraising goal and wanted to begin the construction of the park. I found myself in the perfect place at the perfect time and was enthralled to give back to the local community. Having never managed a construction job before and still being a full-time Cal poly student, there were many obstacles I learned to overcome, but the knowledge I gained from my volunteer work is irreplaceable.
Research

Children's Development Through Playing

Extensive research has been done to understand better the lasting developmental effects and importance of access to playgrounds and the presence of play in children’s lives. Data on the demographics of the area that Parents for Joy is apart, as well as the state and country as a whole has been researched to provide better background for the necessity of the cause.

The Importance of Play: Children

Play is incredibly important for the growth and development of young children. Several aspects of development, including but not limited to, cognitive, creativity, health, and social development, are affected by play. Much of brain development happens at an early age and nurturing a child’s development is essential. Children develop critical thinking skills through exploration of the world around them. Exploration occurs through play. Playgrounds provide a platform for kids to explore their imaginations and create any game they choose. The playground becomes their toy and lets their brains run wild. Many including, “Researchers, educators, and parents have long believed that children learn cause and effect relationships through exploratory play” (Goldstein 11). Not only are analytic skills developed, but so are creative skills. Children who are allowed to play view the world differently, and develop their own understanding of it, rather than children who are not. These children are more creative and diverse in their decision making, especially in the context of art. In one study, “When four to five-year-old children were asked to ‘play with’ or ‘to remember’ 16 common objects, they recalled the items better when instructed to play with, rather than to remember them” (13). In a similar study, children who were allowed to play before creating art used more colors and varying materials compared to those children who were not allowed to play beforehand. This type of creative development is essential to children’s well-rounded growth.

Physical health is just as impacted by play as cognitive health. There are physical benefits for kids to be active and playing in a playground setting with other kids they can be social with. Active play is an outlet for children to release excess energy that can be distracting and destructive. There is a correlation between kids who are inactive, and higher rates of ADHD. Further, one Neuroscientist Jaak Panksepp believes that “one reason for the increasing incidence of ADHD may be the diminishing availability of opportunities for pre-school children to engage in natural self-generated social play. The idea that intensive social play interventions, throughout early childhood, may alleviate ADHD symptoms remains to be evaluated. As an alternative to the use of play-reducing psychostimulants, society could establish play “sanctuaries” for at-risk children in order to facilitate frontal lobe maturation and the healthy development of pro-social” (5). While some more work needs to be done to further prove this idea, there is already evidence in favor for active play benefitting the health of young children. Children also enjoy active play, and are more likely to participate in it, rather than participate in sedentary activities. This is unfortunate for young children as “The amount of public space devoted to playgrounds and sports fields continues to diminish, reducing children’s opportunities for active and social play. This contributes to the sedentary lifestyle of young people and the problems, such as obesity and attention deficits, that accompany it. Encouraging active play and participation in sport thus become of vital importance” (23).

Play is imperative to the social development of children, an increasingly important aspect as children get older. A child lacking play can also be lacking in other areas, such as development and overall happiness. Play deprivation is just as serious as sleep deprivation, and both affect the growth and functionality of the child (27). Children who play, especially with other kids, will develop a stronger sense of social awareness, and be able to interact with others in a normalized way. Active play helps kids understand social habits and values. Special needs children can benefit from learning social norms and interactions just the same as able-bodied children, if not more so. Children who suffer from an impairment are more likely to be treated differently than their peers. If they can learn social norms at a young age, through equal play opportunity, they are more likely to make meaningful connections with those around them. It has been found that “Children who do not play or who do not have the opportunity to play are at increased risk for abnormal development and deviant behavior. Without play, self-control does not develop adequately” (27). Integrating these children into the daily play ritual gives them an equal chance to a successful and happy life.
Special needs children are no exception to play’s effect on growth and development. Currently, these children do not have the same opportunity to play as able-bodied children. Children who do live with disabilities do not engage in play the same way as children living with none do, so the average playground or play place usually does not suffice for their needs. Dr. Fred Donaldson asks “Do special-needs children play differently from other children? Experts often write that special-needs children cannot or do not play like normally developing children. All children can play, says Dr. Fred Donaldson. ‘As a playmate I adapt the play to include whoever comes to play. It is not the child’s special need or culture with which I play” (Goldstein 25). To better understand the extent of the issue, the following data has been researched and formatted for your understanding. Information is on the prevalence of individuals living with disabilities in California, and the whole nation, and the specific breakdown of the most common 6 types of disabilities. All numbers were found on the US Census Bureau QuickFacts. More relevant statistical findings can be found in Appendix A.

### Prevalence of Disability by Age (USA)

<table>
<thead>
<tr>
<th>Age</th>
<th>Prevalence of Disability (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Ages</td>
<td>12.8%</td>
</tr>
<tr>
<td>4 &amp; Under</td>
<td>0.7%</td>
</tr>
<tr>
<td>5 to 15</td>
<td>5.5%</td>
</tr>
<tr>
<td>16 to 29</td>
<td>6.2%</td>
</tr>
<tr>
<td>21 to 24</td>
<td>10.9%</td>
</tr>
<tr>
<td>65 to 74</td>
<td>25.3%</td>
</tr>
<tr>
<td>75 and over</td>
<td>49.6%</td>
</tr>
</tbody>
</table>

*Figure 1: Reported percentages of disabilities per age group in the US*

### Prevalence of Disability by Age (California)

*Figure 2: Prevalence of the 6 major disability types in persons of all ages in US*
<table>
<thead>
<tr>
<th>Age</th>
<th>Prevalence of Disability (%)</th>
</tr>
</thead>
<tbody>
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<tr>
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<tr>
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<td>4.9%</td>
</tr>
<tr>
<td>21 to 24</td>
<td>8.5%</td>
</tr>
<tr>
<td>65 to 74</td>
<td>24.3%</td>
</tr>
<tr>
<td>75 and over</td>
<td>51.3%</td>
</tr>
</tbody>
</table>

*Figure 3: Reported percentages of disabilities per age group in California.*

![Prevalence of 6 Disability Types (California)](chart)

*Figure 4: Prevalence of the 6 major disability types of persons of all ages in California*

According to the child encyclopedia for play: “Children with physical disabilities, for example, cerebral palsy (CP), have mild-severe motor delays affecting mobility, posture and strength needed for locomotion and exploration of their surroundings,”(Jenvey) meaning they are unable to use the same methods of play that “normally-developing” children do. Unfortunately, not being able to engage in what is considered “normal” play time, leads these children to miss out on vital developmental aspects of their life. Rather than being but in specially crafted play situations, they are often forced to only engage with their adult supervisors and caretaker: “Children with CP are usually time poor, because of time spent in adult-structured activities that preclude opportunity for play or leisure activities”(Jenvey). This leaves us with already under-developed kids missing out on more vital developmental experiences, only exacerbating their disabilities more.

Many people may think that the real reason kids with disabilities are not playing with other kids normally is because they cannot, but this is not the case. The reality is that there are no accessible avenues for them to play in. In 2016 the UK’s former secretary of state, Lord Blunkett chaired “The Play Inquiry” which was created to address public concerns about the inequalities of accessible play for children with disabilities and their families, (SENSE). Sense is an organization in the UK that began as a resource and asset for those living as deafblind, but has now grown to
support all facets of disabilities. They partnered with Lord Blunkett to release the inquiry and raise awareness about the topic. With the release of the report, CEO of Sense Richard Kramer says: “Play is critical in giving children the best start in life and improving outcomes for children and their families. The report makes clear, however, that where a child has multiple needs, the barriers they face to accessing play settings and activities are also multiplied,” (SENSE).

The entire in-depth report was created and released with various key findings which highlight the reality of the issue at hand. What was extra interesting about this report were the findings having to do with how the parents of these children living with disabilities were also excluded and affected by a lack of accessibility. Regarding this, the report concludes: “It means that disabled children don’t have the same chance to form friendships, and parents are prevented from taking a break from caring. Both disabled children and their parents are excluded from their own communities,” (SENSE). Not only is it holding the children back from living their fullest life, but their supporters as well. Being excluded from play time is one thing, but being excluded from one’s community is a whole other thing, yet the two often go hand and hand. These individuals that are unable to participate in the average leisure activities of their peers undoubtedly miss out on essential developmental activities which leaves them feeling only more out of place than before.

## Deliverables

There were many aspects to my scope of work on this project. The hardest part of the job was getting up to date on the latest plans and site logistics that were presented to me. I found the plans to be much different from what I typically see in class due to the nature of the project. I would have never guessed that a playground would look so different in a plan set. However, after understanding the plans, I began to problem solve and work on groundwork issues that the project faced.

The first of these issues was rerouting a stormwater drainage system that conflicted with a previously installed light. Harrison and I visited the site and found the best route for the pipes to avoid the lamp post and developed a new detailed shop drawing for the area. The next step in the project, groundwork, was hindered by the many different utilities that ran under the site.

The community center, adjacent to the site, was at one point a waste water treatment facility for the entire city so there are many different pipes and conduit running through the ground in the area we were working. This posed many problems due to the city’s inability to produce as-built drawings and correct utility layouts. As a result, I was instructed to contact PG&E multiple times to have them re-mark lines to ensure that we would not hit them while digging. Ultimately we moved the entire project up on the site to not disrupt the underlying main utilities that ran through the city. This proved to be an issue later on down the line.

The height of the installed ramps was the first problem with this new change. The ramps allowed children to get up onto the playground-set and worked well with the overall structure. However, due to the raised site, the ramps protrude above the ground level and thus require a railing system to prevent children and adults from falling off of the raised platform. I had to look into railing systems that would anchor into the existing ramps while not impeding on the structure.

Contract documents and budgeting was another area that I oversaw. Since it was volunteer work, many vendors and subcontractors donated their time and changed their finalized price to help the cause. I found this part of the job especially difficult due to the nature of the work. Taylor Hamil had initially tasked me to speak with the subcontractors and deal with the contacts, but this proved unsuccessful because of my lack of connections within the industry. In the end, many people with direct connections to the park donated their time and had friends and family pitch in.

Figure 5: Mayor of Atascadero at Joy Playground Ground Breaking Ceremony
General Work Description

The Site: The site is located in Atascadero’s downtown area. This location was perfect for the playground due to its close proximity with the community recreation center. The goal is to create an inclusive playground that will allow all children to do what most kids take for granted: to play.

The Scope: Taylor Hamil, Harrison Tucker, and I worked as project engineers to facilitate efficient working conditions and track the project’s progress. Harrison Tucker focused on the scheduling aspect of the project while I managed the budget and expenses. Through the combined effort of Harrison and I, progress photos, daily reports, and project specific responsibilities were efficiently accomplished on time.

The Schedule: After nearly five years of fundraising, construction took place in February, 2018. Despite goals to complete project by December of 2018, the project finished over three months behind schedule on April 5, 2019. Many subcontracts were dependent on the donation of materials and labor to our 501(c) account. In addition, unforeseen circumstances imposed several challenges including a regrading design.

The Budget: This entire project was possible because of the loving community members and sponsors. This project focused on finding the least expensive route and looked towards volunteering and donations to keep the budget low. As a result, many of the dedicated men and women who worked on the project shifted the park duties to the end of their schedules. This prolonged the project but allowed it to remain inexpensive. Over the course of the last five years, Parents for Joy raised over a million dollars for the park and they continue to ask for donations to ensure the park is well kept for future generations.

Project Overview: Because of the large amount of donations provided to fund the park in finances and materials, the project required close communication with subcontractors and owners. The difficult coordinating paid off and the final product satisfied stakeholder’s expectations. We achieved all of their requested special accommodations. The children, our biggest stakeholders, were thrilled by all of the different methods of accessible entertainment the playground offered.

Recognitions: On behalf of Harrison Tucker and myself, we would like to thank everybody who helped with the project, most notably, our sponsors and fundraisers. In addition, the Parents for Joy organization raised money and extended their generosity in time and hard work. We would like to thank our advisor, Phil Barlow for his assistance and direction on this rewarding opportunity. We also would like to thank Taylor Hamil, Cal Poly alumnus and lead project manager, for being a close mentor and giving us a great ‘Learn by Doing’ approach to this Senior Project. It was an honor to be involved.
Lessons Learned

This was one of the first large projects that I have been a part of from start to finish. I learned many valuable lessons during this time. One lesson I learned was getting out of my comfort zone. There were many “firsts” for me while working on a project this big. I found myself staying away from activities that were unfamiliar to me and in the end, I believe this would hurt my learning process. I made it my mission to attempt every aspect of the job and not ask others to take on activities I that made me uncomfortable.

One of these new activities for me was calling local companies and asking for discounts for their products. I am not one to bargain on supposedly hard-set numbers so this felt odd to me. However, I began to feel more comfortable talking with people about pricing and discounts. I understood that it was not a stressful activity the more I did it. In addition, to learning how to talk about discounts, I also learned how to talk with subcontractors and discuss their pricing. I learned how to efficiently break down subcontractor bids which helped me decide on which subcontractor got the job.

I learned these skills in my construction management classes, however, I never implemented them in real world applications. It was incredibly satisfying to accomplish these tasks and follow the construction process on a real project. I learned how to give back to the community and how much volunteering means to others. Before this experience, I never saw how volunteering could have a direct effect on people, but this opportunity opened my eyes to the joy my work brought to others. I look forward to more opportunities like this in the future and to continue to give back to my community in many positive ways.

Acknowledgments

A special thanks to Jesse Sanchez, Amber Sucich, and Amelia Ortiz for helping further my research on children’s development through play.

References


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“OUR STORY.” Magical Bridge Foundation, magicalbridge.org/our-story/.


Reflection

I cannot emphasize enough how lucky I felt to be a part of such an incredible project. Thousands of families and community members will enjoy the Joy Playground. I learned a lot about the construction industry through this experience but most of all, I learned how to effectively communicate with industry members.

One area I struggled in throughout the project, was staying up to date. The majority of the project was slow going due to people volunteering their time. There were a few instances were many different activities were going on at the same time and I was unaware of it all. I was one of the last people in the chain of command, so I had to work hard to get the latest news on the park. Though discouraging at first, I learned to better my communication with the project team.

![Figure 7: Grand Opening, April 2019](image)

Seeing children and families line up at the gates before the grand opening was the most rewarding feeling during this project. Harrison and I worked all morning, cleaning the entire site with power washers to prepare the playground for the grand opening. I did not do much labor during this project, but spending the hours meticulously cleaning the structure felt incredible after seeing all the children’s happy faces.

This project left a huge impact on me and I will always cherish the feeling of giving back to the community from this point forth. I have volunteered in the past, but never worked a project that has affected so many people’s daily lives. It felt special to be a part of the small team that helped manage and build the structure and I could not have been happier to learn about the process.

From the beginning of the project, I was shocked by the number of people that knew each other who worked on the project. I found myself working beside some amazing individuals who gave up their time for their community. At the ground breaking and grand opening, I was astounded by the amount of people there to support and enjoy the park. This project taught me the value of friendship and connections within the community you live and the power it has to change lives.