A Landscape Master Plan For Denison Elementary School Campus Improvements

Prepared by: Angie Buchanan
Learning Landscape Program
University of Colorado at Denver
May 2004
# Master Plan For
Denison Elementary School

| Prepared For: | Denver Public Schools  
|              | 900 Grant St.  
|              | Denver, Colorado |

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<tr>
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Project Introduction

The Challenge
Studies show that a well-planned and equipped exterior play area enhances the learning environment, resulting in improved learning and achievement. Such play areas provide physical and mental challenges that translate to improved health and learning attention. Furthermore, with proper design, these areas themselves become outdoor classrooms or learning landscapes. A major secondary goal of all schools, including elementary schools, is to provide a focus for the community — a place to gather and to meet, a place to enjoy, a place that enhances the community's appearance. Mayor John Hickenlooper's statement, “As a community, we receive so many benefits from ensuring that children receive a strong well-rounded education… Learning landscapes is a perfect model of what can be accomplished when the private sector, public sector and the nonprofit community are engaged and invested in a common goal.” (Interview with Denver Mayor John Hickenlooper for the Learning Landscape Alliance video, conducted by Little Voice Productions, November, 2003.)

Denver Public Schools [DPS] is an urban school district with many of the same challenges as other urban districts. The infrastructure is aging — the average facility age is almost 50 years. The ongoing 1998 General Obligation Bond [GOB] will increase the number of schools to 130 but contains no funding for existing school playgrounds. Approximately 75 DPS elementary schools require moderate to extensive renovations or upgrades to meet adequate standards. These include replacing playground equipment, providing irrigation and sod [to eliminate gravel and dirt fields], providing American with Disability Act [ADA] accessibility, and providing an outdoor classroom learning environment. Approximately half of the 75 elementary schools are located within underserved neighborhoods. Transforming the schoolyards in these neighborhoods is most pressing. These schools have chronic disciplinary problems that are disruptive to a school's academic environment. Playgrounds lacking appropriate choices for children become arenas to bully and tease. Recess should be a positive experience that compliments academic development; the playgrounds are a place where children develop their emotional, physical, and social skills.

The Solution
The “Learning Landscape” program is an entrepreneurial, community-minded alliance of public and private interests that seeks to strengthen Denver Public Schools and their surrounding neighborhoods by designing new multi-dimensional playgrounds and social gathering places. The success of this program is founded on a mutual respect of aesthetic, maintenance, safety, and recreational issues. The University of Colorado at Denver’s Landscape Architecture
department offers a seminar course called FINDING COMMON GROUND—EXPLORING THE URBAN EXPERIENCE. Students of landscape architecture, architecture, and other disciplines come together with Professor Lois Brink to research current educational, sociological, and environmental thought regarding urban space in general and elementary school grounds in particular. Each student in the course selects a school from a predetermined pool and uses this knowledge to develop a vision and master plan for each school. The master plan approach suits a multi-faceted contemporary existence. It engages a child’s educational and recreational experience with that of the community at-large.

**The Intent of the Master Plan**

The master plan is a written report and plan that sets forth the structure for future campus improvements. Each school has a vision that embodies the desires of the school and surrounding community. The vision is further delineated into goals that identify the major components of implementation. The goals are defined through the use of text and imagery. A programmatic list of uses is also developed. Lastly, each master plan sets forth the aesthetic ordering system or systems that will be used in the design phase to organize the programmatic uses. This plan, once approved, will provide a framework for fund raising and future construction.

“Within the child lies the fate of the future.”

-- Maria Montessori
History

Denison Elementary is unique, for a few reasons. First, it is a Montessori school, which is a rarity for public schools in the metro area; there are only **three** Montessori schools in the Denver Public School system. Second, it is a magnet school, so the students come from the entire metro region. Third, it is one of four elementary schools within the Mar Lee neighborhood.

This magnet school is one component of a DPS program that began 17 years ago. According to the DPS website, this magnet school is intended to provide diversity and opportunity to students, in racial groups *and* with mixed age classrooms. As a Montessori school, Denison uses innovative learning techniques and employs educational methods, such as community gardens, bilingual teaching, and violin lessons.

**Suzuki Violin**

The Montessori teaching style is based on allowing children to experience while they learn. Although the school does provide music lessons, the students have a barren playground, on which there are few experiential learning opportunities. In order to reflect this Montessori school’s philosophy, there more educational play structures, games, and landscapes should be included on the playground.
Assessing the Present Situation

The Location: Mar Lee

The Denison Montessori School is in the Mar Lee neighborhood, which is also located within the southwest quadrant of the Denver Public School System. This neighborhood blends in with the surrounding neighborhood fabric; Mar Lee and the surrounding areas are almost entirely comprised of lower income, single family residences. It appears to be a typical post-war era residential development, with one house per lot. The neighborhood is zoned low density residential, but the surrounding uses vary. Each of these neighborhoods are framed by major arterials, dotted with various commercial, retail, and light industrial uses. However, the inner streets in Mar Lee are on grid systems with slower speeds, and there is absolutely no transit within the residential section of this neighborhood. There is one bike path that runs through the area, along a greenway. Additionally, there is one public park, in the far northwest corner of the neighborhood. Finally, Mar Lee is surrounded by these major arterials:

|-----------------------------|-------------------------|---------|-----------|-------------------------|-------------|

Mar Lee is a quiet neighborhood, but it surrounded by constant, heavy traffic at high speeds.

Major Intersection: Sheridan and Jewell
Surrounding Uses
Denison is surrounded by retail uses to the west and single family homes on all other sides. The residential area is lower-income homes in an older, kept up neighborhood. The area is free of graffiti, litter, and other problems that often plague urban areas. In short, the residents appear to take care of this area, and although it is a lower-income neighborhood, the residents take pride in living in Mar Lee.

Additionally, Denison is one of four elementary schools in Mar Lee, and it is located behind a strip center, on the busy intersection of Sheridan and Jewell. The playground abuts the back of the strip mall to the west, Jewell to the south, and residential streets to the north and east. The strip mall contains a liquor store, convenience store, cigarette store, and a restaurant.

Area Immediately to the West: Strip Mall
South: Jewell Ave. and Residences
To the South and East: Residential areas
The Mar Lee neighborhood is severely lacking in play opportunities. There is one swing set on the greenway, but there are no other designated playing areas. Additionally, Garfield Park is in the neighborhood, but it is located at the opposite corner of Mar Lee from Denison (it is on the northwest and Denison is in the southwest). It is not within a walkable distance, and there are a few major arterial streets cutting through the neighborhood, which would make this trek almost impossible for young children. But the point is, Denison’s playground could provide a viable play option in the area, which could further provide a centralized focus for the entire community.
Demographics

The resident racial population of the Mar Lee neighborhood is typical to the Denver region. The 2000 Census results showed that the population of the community is approximately 31.7% Latino; 10.8% African American; 51.9% White; and 5.6% are “other” (source: The Piton Foundation). The demographics of the neighborhood do **not** reflect Denison's population, as Denison is a magnet school, where the students are transported from other neighborhoods.
Site Inventory

This site is full of potential. There are several opportunities to include play areas, which could either be separate or part of a system. Based on all input, there should be a few distinct play areas: the basketball courts; the separated ECE, intermediate and primary play structure areas, a grass field, a system of play areas in an unbounded area, and an interactive learning space. However, there are currently only three current viable play areas: the basketball court area, the intermediate structure, and a newly installed primary play structure. Again, there is a lot of room for improvement.

Current Playground Landscape

This area is currently barren, has very few play choices, does not have a delineated field, has only one tree, and it is almost completely void of color. However, the intent of this master plan is to change this landscape into a vibrant, imaginative play space. There are several elements of the school that are unique, and the playground should reflect this.

Existing Art Element in Front of School
Map 2: Site and General Surfaces
General Surface Areas

The surface area on the Denison site can be segregated into five very distinct areas: (1) the existing basketball courts and surrounding painted elements; (2) the large pea gravel area, which contains an outdated backstop, often used for soccer; (3) an intermediate, fenced in play structure; (4) a new primary climbing area, surrounded by a chain link fence; and (5) the area surrounding and adjacent to the global garden. However, there are two main surfaces, asphalt and pea gravel. Finally, the lone tree sits adjacent to the two existing play structures.

The Site

1. The Existing Basketball Courts
The first area includes the basketball courts, four square, tether ball, hopscotch, and a painted map of the United States. This area is surrounded by a chain-link fence on two sides, and it is entirely paved in asphalt, which should be replaced.

Asphalt
Although the hoops are in good working order, the paint on the asphalt has almost entirely disappeared. As a result, the lack of paint makes any sort of play in this area almost impossible. However, the area does have promise, and the painted map of the United States is an innovative way to teach geography, creating an interactive landscape; it simply needs to be painted.

**US Map**

2. The Large Pea Gravel Area
   The second area is the largest. It is an incredibly stark, barren place, but it is the most popular place for the older students to play. It is simply an enormous dirt and gravel field. However, it is the only place older children have space to run on the playground. It is surrounded by three chain-link fences, has no shading, and abuts the back of the strip mall on Sheridan. This area should include grass, a playing field, and have shading.

**Pea Gravel Area**
3. Intermediate Play Structure
The third area is a vibrant, usable space, and it is extremely popular with younger children. There is a new jungle gym, with two slides, places to crawl, and it is large enough to entertain an entire class. The ground cover is pea gravel. It also is encompassed by a chain-link fence, but it does not feel isolated or barren. In fact, it is a colorful, visible, usable space, and the children seem to use it. However, since it is one of only two structures on the site, the students have become “bored” with this area. They need more play options.

Existing Intermediate Structure

4. Primary Climbing Area
However, the fourth area is immediately adjacent to the third, and it has recently been renovated. It contains a new climbing wall, several primary play options and one older piece of iron equipment; it is also completely surrounded by a chain-link fence, and the ground cover is wood fiber. This area is now very popular, and the students gravitate towards this area. These improvements are definitely a success.

New Climbing Options
5. Areas Surrounding and Adjacent to the Global Garden
Finally, the fifth area includes the existing global garden, an unused open area wedged in between the building, and an open piece of land. This area is separated from the rest of the playground, it has its own entrance, and it is surrounded on three sides by a chain-link fence. The ground cover is mixture of pea gravel, asphalt, and plantings. The contained planting areas vary by season, according to the Denver Public School website. This area is often used by classes as an outdoor classroom, and the school intends to use this entire area as an interactive, natural habitat area, which will include: animals, a water feature, and native plantings.
General Conditions

Basically, this school is in dire need of improvements to all of the playing areas listed above, except the newly added primary play structure. Additionally, most of the existing surfaces need to either be replaced or repaired. The majority of the site is covered in either asphalt or pea gravel. There is very little concrete, and there is no grass or landscaped areas on the playground, except the plantings in the Global Garden.

Asphalt Areas

Asphalt covers the parking lot, the area between the western side of the building and the playground, some areas around the Global Garden, and the basketball courts.

The parking lot is located on the north end of the playground, and it forms a half moon around the basketball courts. Although it surrounds part of the playground, it is entirely fenced off, by chain link fences. The surface is in fair condition, but it needs a new seal coat. As for the area between the primary play structures and the western side of the building, the asphalt is in fairly good condition, but it also needs a seal coat and fresh paint. The area around the Global Garden is in the same state, but this master plan calls for removal of all asphalt in this area. Finally, the basketball court area is highly used, but it is in poor condition. As a result, this asphalt should be completely replaced, and the entire area should be repainted.

Pea Gravel

The vast majority of the playground is covered in pea gravel. This creates the appearance of a barren landscape, and this landscape also serves as both the main play area and the athletic field. However, it is simply a large open area, where older children make up their own games during recess. There are is no grass in the area, no markings for gaming, and old athletic structure. Unfortunately, this is an unwelcoming area, but there is a lot of potential. Since the area is used as an athletic field, the pea gravel should be replaced by one. The open area desperately needs grass, paint, shading, and variety in the landscape. However, the pea gravel works as a soft surface around the existing intermediate play structure. The surface itself is in good condition; there is simply far too much of it. Finally, irrigation is an issue in the pea gravel areas.

Drainage

The landscape gently slopes to the north, and water flows off the site in this direction.
Accessibility and Parking

Pedestrian Access
The playground is surrounded by a chain link fence, which completely borders the area to the north, south, and west. The only public pedestrian access area is on the southern portion, with a staircase descending into the grounds. This access point is located on a central section of Jewell, which is a major arterial; there are no crossing lights for pedestrians in this section, which is uninviting.

ADA / Handicap Accessibility
Handicap accessibility to the playground is limited to using the sloped, asphalt parking lot. However, there is a sloped ramp on the eastern side of the school, which provides access to the front of the building. There are a few handicap spaces in the northern parking lot, but there are no spaces on any of the residential streets; this includes the eastern side of the site, where the handicap ramp is located.

Vehicular Access and Parking
There are two parking lots for the faculty, and there is public parking on the south and east sides of the school. The buses pick up and drop off students on the eastern side of the school; this system appears to work well. The Denver Public School system requires one parking space per classroom, plus . for every ECE through third grade classroom; it also requires an additional fifteen spaces for support and five for visitors.
The Constituents

1. The Faculty
This group meets regularly to discuss how to improve the school. They are present to observe student behavior, and they have first hand knowledge of how the playground works. The faculty includes teachers and the principal. They realize improvements must occur, to give their students an invitation to explore the outdoors. They are teaching with almost no play equipment outdoors, and the students are not using the space to the extent of its entire potential. The playground is currently barren, empty, isolated, and stark; this does not invite play.

2. Neighborhood Residents
Residents include the entire Mar Lee neighborhood. There are very few parks in the area, for either the students or the neighborhood in general. This playground is an opportunity for the neighborhood residents to have a centralized play space, which could create a heightened sense of community in the area.

Neighborhood

3. Parents
Parents of students at Denison could benefit from a better playground, because it would give the children a place to play outdoors. Denison is a magnet school, so most of the students do not live within Mar Lee. However, several of them come from rough neighborhoods, where there is little or no opportunity to play outdoors. Although I have not had the opportunity to meet with a large number of parents, I have spoken to two parents of current students, who have been working on designing concepts for an improved playground; this includes play sculptures and a landscape plan. These two parents have, however, spoken with other parents at the school, and they informed me that the other parents are very much in support of improving this playground. Overall, the parents want to create a better, more vibrant, and safer space for their children to explore.
4. Students
The student attendees of Denison would like a better space to run around outdoors. They currently have one play area, but it has only one tree, one play opportunity, and it is designed for younger students. Thus, the older students have little to no place to enjoy recess. Also, the students have a traditional school year. There are 517 students attending Denison Montessori, without play choices; however, the maximum capacity of this school is only 375.

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<th>Number of students</th>
<th>ECE and Kindergarten</th>
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<td>Primary (1st through 3rd)</td>
<td>187</td>
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<tr>
<td>Intermediate (4th and 5th)</td>
<td>150</td>
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<td>Total</td>
<td>517</td>
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5. Maintenance personnel
This group includes persons who care for the playground, and it also includes the Denver Public School system, since they provide maintenance. Don Moon recently helped the school obtain the two play areas they currently have.

“Our behaviors change only if we decide to belong together differently.”
- Margaret Wheatley
CSAP Scores

Scores for the Colorado Student Assessment Program (CSAP) are outlined below, providing a standardized assessment of student performance compared to previous years, other students in the DPS system, and other students throughout Colorado.

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<tr>
<td>3rd Grade Writing</td>
<td>15% under</td>
</tr>
<tr>
<td>4th Grade Reading</td>
<td>11% over</td>
</tr>
<tr>
<td>4th Grade Writing</td>
<td>16% over</td>
</tr>
<tr>
<td>5th Grade Reading</td>
<td>22% over</td>
</tr>
<tr>
<td>5th Grade Writing</td>
<td>25% over</td>
</tr>
<tr>
<td>5th Grade Math</td>
<td>7% over</td>
</tr>
<tr>
<td>6th Grade Reading</td>
<td>41% over</td>
</tr>
<tr>
<td>6th Grade Writing</td>
<td>52% over</td>
</tr>
<tr>
<td>6th Grade Math</td>
<td>45% over</td>
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In short, the children at this school outshine the Denver Public School system as a whole. According to the DPS website, “the trend towards high achievement extends across ethnic boundaries: the majority of minority children leave Denison with scores at or above grade level and well above the district average for their ethnic group.” Judging from the standardized scores, this school uses a teaching style that works. Denison’s accountability ranking is high, and the improvement rating is stable.

This school is full of children with high scholastic potential, and they could perform even better with more creative outlets on the playground.

"It is by teaching that we teach ourselves, by relating that we observe, by affirming that we examine, by showing that we look, by writing that we think, by pumping that we draw water into the well."

--Henri Frederic Amiel
Survey of Community Desires

Informational Interviews

After attending a faculty meeting, it became clear that this school wants change on their playground. The students, teachers, parents, and neighborhood residents all share this ideal; they simply want something out there. The current playground is a dismal, barren place, as a direct result of a recent removal of playground equipment; as Principal Beth Hamilton stated, when the city put in a new library, they removed almost all of the existing play opportunities. Now, the students are so desperate for improvements that, when asked what additions they would like to improve it the most, they repeatedly replied, “put in grass”.

Current Appearance of Playground

Specific Requests by the Faculty

The faculty has a few specific goals and ideas, including:

1. An Outdoor Classroom
2. A Natural Habitat and Ecological Learning Area
3. Add More Shading
4. Keep All Existing Basketball Areas
5. Provide Buffer Against Alley to the West
6. Play Choices

1. An Outdoor Classroom
Principal Beth Hamilton would like to include some sort of outdoor learning space in this plan. There is an open area between the new library and the school, completely separated from the playground. This space faces the garden, and it would be ideal for an outdoor classroom.

**Possible Location for Outdoor Classroom**

2. **A Natural Habitat and Ecological Learning Area**

Maureen Arredondo, Toni Phillips, and Tony Arredondo, all part of the Denison faculty, recently attended a workshop with the National Wildlife Federation, to learn more about creating schoolyard habitats. They are working on writing a grant, which would help fund this project. Additionally, they would like to use the area to the West of the Global Garden and South of the library for this purpose. Their goal is to create a natural habitat area with wildlife, and the school has already installed bird feeders in this area. This area should include some sort of water feature to attract birds, quiet places to sit, and paths, to lead children around the area. The school already has a mission statement for this area.

**Potential Sights and Activities**

Finally, because of this addition, Denison will be a sister school to another Montessori school on the Ute Reservation in Southern Colorado. Both schools intend to learn from each other, visit each other, and create similar habitat areas. This is a collaborative effort, and the school is very excited about including this element.

3. Add More Shading
There is currently only one tree on the playground. It is an enormous maple tree, but, unfortunately, it is the only shaded area on the entire play area. According to Susan Richards, the Physical Education teacher, children gravitate towards this tree during warmer times of the school year. The problem, as she explained it, is that this is the only shade they have. To put things into perspective, there are 517 children at Denison, but there is one tree on the playground.

The Lone Maple

4. Keep All Existing Basketball Courts
The students recently lost one of their basketball courts, and, although they still have three, they are always in use. As a result, Susan Richards requests that the basketball areas remain where they are, so students can continue to play in their favorite areas.

5. Provide Buffer Against Alley to the West
Unfortunately, safety is a concern in this neighborhood. According to Principal Hamilton, the alley to the West of the school is a hub for various criminal and adult activity. Therefore, she requests that this plan include a buffer on the west, between the playground and the infamous alley. This
would shield the students from drug deals, illicit conduct, and homeless people sleeping during the day.

6. Play Choices

A large number of children at Denison live in impoverished neighborhoods, with almost no opportunities to play outdoors. Unfortunately, their school’s playground does not give them play choices, either. According to Susan Richards, these children simply need a place to play, and they are craving a climbing area.* There is currently one jungle gym for younger students, but they do not use this area for its intended purpose. They have become bored with their sole choice, and they have taken to climbing on the top of the structure, rather than playing on it.

*Since this interview, a primary play structure, which includes a climbing area, has been installed.

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<th>Group</th>
<th>Underlying</th>
<th>Desired Outcome</th>
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<tr>
<td>Students, faculty, parents</td>
<td>Concerned about safety at night</td>
<td>More lighting</td>
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<tr>
<td>Students, faculty, parents</td>
<td>Would like to buffer the unwanted element to the west</td>
<td>Either artwork, a different fence, or some sort of wall</td>
</tr>
<tr>
<td>Students and faculty</td>
<td>Only one tree / no shading</td>
<td>Add shade structure and several trees</td>
</tr>
<tr>
<td>Students</td>
<td>Any place to play outside</td>
<td>GRASS</td>
</tr>
<tr>
<td>Faculty</td>
<td>Outdoor learning experiences</td>
<td>An outdoor classroom</td>
</tr>
<tr>
<td>Faculty</td>
<td>Play choices</td>
<td>Keep existing, but add more elements</td>
</tr>
<tr>
<td>Students and Faculty</td>
<td>Complete lack of age-appropriate play equipment</td>
<td>Adding equipment for older students</td>
</tr>
<tr>
<td>Students</td>
<td>Existing four square and hopscotch have no paint</td>
<td>Renew this space, to make it visible and vibrant</td>
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Surveys

The Survey Methodology

The Denison constituents received two different surveys. The first survey was a simple form, which was distributed among various students. It asked the survey participant to pick a playground amenity from a group of photographs. However, the second survey asked the students to draw a map of the playground, depicting both where they want to go and where they don’t want to go, in this area. Although the first survey collected a wealth of specific preferences, the second survey was more informative, because it showed how the students perceived the existing playground. By discovering what they like and don’t like, it became clear what types of equipment could augment their playground experience.

The first survey collected enormous amounts of feedback. By far, the most prevalent request is for a grass field. As the students explained, they simply want a place to play on grass, rather than gravel and rocks. They also requested boulders, water play, play equipment, swings, and climbing equipment, in that order. There were, of course, a few requests for all of the items on the survey, but these were by far the most popular choices. This survey is intended to be a catalyst for generating possibilities for the playground. It is also intended to compare data among other schools. Although it is not the only source of input for this master plan, the elements were included in order of priority, based on student preferences.
Table 4: Student Preferences from Photo Survey

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<th>Photograph</th>
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<th>%</th>
<th>Rank</th>
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TOTAL 56 127 183

The second survey demonstrated how children see the playground, but it also showed where the area could be most improved. These students were very practical in their observations: they drew green grass and paint on existing play areas, but they simply want some sort of improvement. A few of the students drew a water feature west of the garden. Again, the most prevalent request was simply grass.

Both of these surveys were conducted in two classrooms, a Kindergarten class and a mixed classroom, with students in 4th through 6th grade. Interestingly, the requests and observations from these two groups were not inconsistent. After wanting grass, all of these age groups suggested having more play choices, a better outdoor classroom learning area, and an interactive landscape. Interestingly, almost all of the students included a water feature on the south side of the library, which is where the school currently has plans to create a natural habitat area with some sort of water feature. Simply stated, the students and faculty are in complete agreement about what to do with the space to the south of the building.
Two Surveys:

Your Name: Rana
Your Grade: 

Your Name: 
Your Grade: 

“Allow children to be happy in their own way, for what better way will they find?”

- Samuel Johnson
Site Description
Denison has one main building on the eastern portion of the site, and the parking is located at the northern end of the playground. The cultural garden is in the southeast corner, and the entire area to the west of the building is a pea gravel playground. There are four main entrances onto the playground, including: (1) from parking lot, (2) exiting the main building, (3) from the eastern side of the school, by the bus drop off area, and (4) on the southern edge of the playground, on Jewell Avenue. Please note that the “Old Equipment Unused Area” portion has recently been renovated.

Map 3: General Map of Existing School Site
Playground Equipment

As per the request of various constituents, most of the playground equipment will stay in its current location, and all new playground additions will be added to the existing structures.

There is little existing playground equipment, because DPS removed most of it when they added the new library. However, there are two distinct playground areas, including the intermediate play structure area and the newly added primary climbing area. Both are fenced in, and they are only accessible from one eastern entrance. All in all, this playground is extremely lacking. As per the site inventory assessment, only 68 children, out of 517, are accommodated by the current playground equipment. However, this number changed when the new climbing area is ready for use. As far as the existing equipment, it is in excellent condition. The climbing area is barely one month old, the basketball hoops and backstops are in good condition, and the intermediate play structure, aka jungle gym, is only a few years old. However, the painted play areas need to be repainted. In other words, there are currently three viable play areas: the basketball court area, the intermediate structure, and the newly installed primary climbing structure.

Please refer to the General Surface Areas section for further description.

Recent Improvement Projects

The school recently added a climbing gym area, which replaced the old, outdated play equipment; they chose this type of play structure, based on observations of children currently climbing on the new jungle gym. They hired Children’s Play Structures, a company based in Littleton, Colorado, to design a climbing area. The new structure was completed in April, 2004. According to Susan Richards, the Physical Education teacher, this area has been a success. However, there are two problem areas: the bouncing swing causes fights, and the crow’s nest requires too much supervision. But, all in all, the children and faculty are please with the addition.
This design incorporated one piece of the existing, older play equipment, it is adjacent to the maple tree, it has a sound element, and it includes two benches.

**New Bench**
Input: A Giant Dinosaur and A Landscape Plan

The Giant Dinosaur

There are two parents at Dension who may be able to assist in creating a more vibrant playground. Bill Gian, one of the parents at Denison, actually designs playground equipment. He has created imaginative sculptures for play spaces that resemble pterodactyls and other interesting creatures. These contraptions are large areas, where several children can climb, all at once. He has already designed a structure for the playground, which is a pterodactyl with a 30 foot wingspan.

“Squiggles”

He has other existing play structures in Denver, and they have been an enormous success. One of these playthings is a huge dragon, who resides at the Arvada Center for the Arts; his name is Squiggles. Squiggles has play opportunities above, below, on the wings, and around the creature. Additionally, this play structure is designed to easily accommodate disabled children.

A Landscape Plan

Another parent at Denison, Tina Bishop, is a landscape architect who has already created a landscape plan. She has collected public information, compiled her findings, and drawn a new
landscape for the playground. Although her plan does not include placement of play equipment, it is an excellent landscape design, and it is incorporated into this master plan.

**Map 5: Tina Bishop’s Landscape Plan**

This plan includes several groupings of trees, and a sports field. Again, the basic elements of this landscape plan have all been included in this master plan.

"Never doubt that a small group of thoughtful, concerned citizens can change world. Indeed it is the only thing that ever has."

- Margaret Mead
Proposed Plan

This design promotes options, incorporating an amphitheater ordering system. It includes several trees, which will give the area more variety in the landscape, more play options, shading systems, enhance the natural habitat landscape, and it will provide a buffer to the alley on the west. There are currently 512 students at Denison Elementary, but there is only one tree. The combined age play area has symmetry, connectivity, and it is easily visible. It is a play space with a centralized focus, which enhances camaraderie, draws people, and gives students a place to gather and people watch.

However, the habitat learning is the most important addition to this site, as an integral, innovative ecological learning space. It will tie in an outdoor classroom, the Global Garden and the currently empty area. This area is separate from the rest of the playground, and it will become a system of outdoor learning opportunities.

This plan also includes several trees, which will provide more variety in the currently barren landscape, more play options, shading systems, enhance the habitat learning area, and it will provide a buffer to the alley on the west.

With the addition of these elements, this playground will become a vibrant space, where students of all ages have play options, it will be a learning tool, and it will provide the general community with a unique play area.

The proposed plan encompasses several elements from various sources, including the ideas of faculty members, students, Bill Gian and Tina Bishop.
Map 7: Proposed Site Plan
Program Elements
This master plan calls for several new elements on the site. The addition and completion of these components will create a vibrant, popular outdoor space. This list includes requests from the public, students, and the faculty.

The elements include:

- A Boulder Field
- Age Appropriate Play Structures
- A Natural Habitat Landscape
- Two Murals
- Game Tables
- A Track
- Iron Fencing
- A Grand Entrance
- A Water Feature
- Art Elements
- A Giant Dinosaur
- A Shade Structure
- Several Swings
- At Least 40 Trees
- An Outdoor Classroom
- A Painted Athletic Field
- And last, but not least … Grass!

This plan is intended to create a useable play space, for students of all ages. Both the school and the community need a friendly, useable play space, which is an exciting, inviting area. This must include a variety of play options, shading, landscape variations, and equipment for various ages. Since there are four distinct, separate areas on the playground, there should be four distinct, separate play spaces. This playground should reflect the Montessori teaching style of this school, and, based on the curriculum, the playground should include outdoor learning opportunities with various interesting elements, to inspire independent, active learning. Everyone involved in this process is enthusiastic, and the enthusiasm is contagious; this has the potential to become a vibrant space for the entire community.
Inspiration

Barren landscapes, empty spaces, isolated areas, and stark elements.

This playground is filled with sand, no shelter, and it is completely surrounded by a chain link fence. However, the faculty, students and community are filled with a common desire to improve the landscape, into a brilliant play space. The current elements are sand, fences and blue sky. In spite of the playground’s limitations, students at this school make their own games and find their own play. Imagine the possibilities, with creative spaces to play in. This playground area has so much potential, it simply must be renovated … for everyone.

Vision Statement

My vision is to create an exciting, vibrant playground for the students, the school, and the community. This includes play options, shading, landscape variations, and equipment for various ages. It should reflect the Montessori teaching style, to inspire independent, active learning outdoors.
Ordering System

Amphitheaters have historically been places for crowds to gather, to watch fighting, playing, beauty, or other common entertainment. Since children perform when they play, this plan implemented an amphitheater ordering system. This will provide a focal point, with play and seating options. There are several examples of how this system works for groups of people, and how it has consistently drawn observers. It consistently gives crowds both the sense of camaraderie and of a protected space. In the built environment, the Coliseum is the most prevalent example.

The Coliseum

![Coliseum](image)

However, in the natural environment, Bryce Canyon is a series of amphitheaters, which also continuously draws observers.

Bryce Canyon

![Bryce Canyon](image)

This system is simply an ideal way for groups of people to enjoy the same phenomenon, and, in my opinion, it is also ideal for playgrounds.
Goals

My goals for this site include:

- Put in grass
- Create a vibrant space
- Enhance safety
- Add play options
- Create a natural habitat
- Provide play structures for all ages
- Use input from all constituents
- Build a better community.