A Landscape Master Plan For Schmitt Elementary School
Campus Improvements

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Learning Landscape Program
University of Colorado at Denver
May 11, 2004
Master Plan For
Schmitt Elementary School

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

Reviewed: Principal, Schmitt Elementary date

Reviewed: CSC Representative date

Reviewed: P. M., DPS Facility Management date

Reviewed: Grounds Supervisor, DPS date
Facility Management
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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.” is a reflection of this community value.

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.

A smiling face in a sea of pea gravel  Source: Ian Bates
Part I: Assessing the Present Situation

“The outdoor play environment should enhance every aspect of child development—motor, cognitive, social, emotional—and their correlates—creativity, problem-solving, and just plain fun.”  --Frost & Wortham 1988

Locational Context

Jakob Schmitt Elementary is located in the heart of the Ruby Hill neighborhood, just west of the South Platte and Ruby Hill Park. The school and grounds cover two full city blocks, and are bordered on all sides by significant stretches of single family homes. Three of the four bordering streets, Colorado, Tejon and Vallejo, are very quiet, with little traffic. Jewell Avenue, which forms the southern boundary of the block, is the busiest of the four bordering streets, but volumes are still fairly low. Evans Avenue, three blocks south of the school, is the closest major arterial, and commercial district. Ruby Hill Park, two blocks east of the school, provides outdoor recreation facilities, many acres of open land, steep sledding hills and commanding views of the Denver and the Platte Valley.

Map 1: Schmitt Elementary Location Map
History
The Ruby Hill Neighborhood has long been known throughout Denver for the wonderful sledding hill found in what is now Ruby Hill Park. The bluff in the park was possibly first used by natives as a vantage point to view the Platte Valley and plains to the east. The houses in the neighborhood to the west of the park were built in the years following World War II, along with Jacob Schmitt Elementary School, built in 1954.

Source: Google Images

Neighborhood Demographics
Over the past decade and a half the Ruby Hill Neighborhood has seen somewhat of a demographic shift. The general trend has been an influx of Hispanic residents, as well as an increase in the number of Hispanics born in the neighborhood relative to all other racial groups. Currently, the neighborhood is approximately 60% Hispanic, 35% White with Asians making up the majority of the remainder. The median ages of the different racial groups reveals the changing nature of the neighborhood. The median age for whites in the neighborhood is about 47 years, while the median age for Hispanics is 26 years.

School Demographics
Schmitt is a traditional schedule school, and provides education for ECE through 5th grade. For the 2003-2004 school year the approximate enrollment was 450, and the school is currently at maximum enrollment. The demographics of the student population mirror those of the neighborhood. With so many young Hispanic families, it is not surprising that 79% of the students at Schmitt Elementary are Hispanic. The remaining students are split between White, Asian and African American racial groups. Of the student population at Schmitt, nearly 82%

Source: Google Images

Review Photo (3320) by Greg Nikkel
receive reduced price or free school lunches, consistent with the lower median income of the neighborhood as a whole. Additionally, almost 40% of the students at Schmitt are English Language Learners, compared to just over 26% for DPS as a whole. Given these statistics, the attendance rates and suspension rates are quite impressive. While the rest of the district maintains a 93.9% attendance rate, Schmitt students achieve a 95.2% rate. The referral rate for Schmitt is roughly 6% of the overall rate for the District.

<table>
<thead>
<tr>
<th>Table 1: Student Attendance and Completion 2001-2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>This School</td>
</tr>
<tr>
<td>Attendance Rate</td>
</tr>
<tr>
<td>Suspension Rate</td>
</tr>
<tr>
<td>Stability Rate</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Table 2: Free or Reduced Price Lunch 2001-2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schmitt</td>
</tr>
<tr>
<td>% Students Receiving Free or Reduced-Price Lunch</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Table 3: English Language Learners 2001-2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>This School</td>
</tr>
<tr>
<td>% English Language Learners (Spanish)</td>
</tr>
<tr>
<td>% English Language Learners (Total)</td>
</tr>
</tbody>
</table>

Table 4: CSAP Comparison with Schmitt Elementary 2003

<table>
<thead>
<tr>
<th></th>
<th>Grade 3 Reading</th>
<th>Grade 3 Writing</th>
<th>Grade 4 Reading</th>
<th>Grade 4 Writing</th>
<th>Grade 5 Reading</th>
<th>Grade 5 Writing</th>
<th>Grade 5 Math</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Schmitt</strong></td>
<td>44%</td>
<td>23%</td>
<td>41%</td>
<td>33%</td>
<td>38%</td>
<td>30%</td>
<td>28%</td>
</tr>
<tr>
<td><strong>DPS</strong></td>
<td>55%</td>
<td>37%</td>
<td>37%</td>
<td>29%</td>
<td>41%</td>
<td>31%</td>
<td>30%</td>
</tr>
</tbody>
</table>


Table 5: CSAP Trends for Schmitt Elementary 1999-2003

<table>
<thead>
<tr>
<th>CSAP Trends 1999-2003</th>
<th>Grade 3 Reading</th>
<th>Grade 3 Writing</th>
<th>Grade 4 Reading</th>
<th>Grade 4 Writing</th>
<th>Grade 5 Reading</th>
<th>Grade 5 Writing</th>
<th>Grade 5 Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>44%</td>
<td>23%</td>
<td>41%</td>
<td>33%</td>
<td>38%</td>
<td>30%</td>
<td>26%</td>
</tr>
<tr>
<td>2002</td>
<td>43%</td>
<td>26%</td>
<td>29%</td>
<td>23%</td>
<td>39%</td>
<td>25%</td>
<td>29%</td>
</tr>
<tr>
<td>2001</td>
<td>63%</td>
<td>**</td>
<td>32%</td>
<td>21%</td>
<td>27%</td>
<td>**</td>
<td>19%</td>
</tr>
<tr>
<td>2000</td>
<td>48%</td>
<td>**</td>
<td>34%</td>
<td>15%</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>1999</td>
<td>34%</td>
<td>**</td>
<td>20%</td>
<td>8%</td>
<td>**</td>
<td>**</td>
<td>15%</td>
</tr>
<tr>
<td>%Change Previous-2003</td>
<td>29%</td>
<td>-12%</td>
<td>105%</td>
<td>313%</td>
<td>41%</td>
<td>20%</td>
<td>73%</td>
</tr>
</tbody>
</table>


Staff, Teachers, and Parents

The staff at Schmitt is more experienced, with higher education levels than the district average. Schmitt has 54% of teachers with master’s degrees or higher, compared to 44.1% district-wide. 93% of the staff has completed some post-graduate work of some kind. Moreover, 54.2% of Schmitt’s teachers have 11 years or more of experience, compared to 41.7% district-wide. The average staff person has 16.5 years of experience. The principal, Gaynell Lawrence, has 11 years experience as a principal, and all 11 of her years have been spent at Schmitt.

The parents at Schmitt are generally satisfied with their school, with positive responses from parents 83% of the time. There is an active PTA and many highly dedicated parent volunteers and aids.
**Surrounding uses and neighborhood amenities**

Schmitt Elementary is in close proximity to several major parks, including Ruby Hill Park. The character and amenities of the surrounding parks should be taken into consideration in creating the Schmitt master plan. Ruby Hill Park is a large regional park that contains three main elements: large and lighted baseball fields, a small swimming pool, and large tree covered hills. The baseball fields are not intended for use as open play areas for kids, and are not easily accessible to the kids of the neighborhood. The pool is an outdoor pool, and is open only during summer months. The large treed hills are currently used primarily in the winter as sledding hills, and are too steep for most recreational activities or organized games. Directly south of the school is an unnamed park. This park also contains variable terrain, and lacks open and flat grassy fields. There is some newer playground equipment on site, though the elements are quite limited.

**Site Inventory and Safety Assessment**

**Overview**

The Schmitt school grounds are striking in their vast size, and desert-like quality. There are no shaded areas or trees to protect the children from the intense sun that reaches the playground all day long due to southern and eastern exposure. Indeed, the playground lacks vegetation of any kind, except the small patch of heavily trafficked grass near the point where kids access the play equipment. Several acres of flat, dry, hard-packed dirt make up the majority of available play space. A large portion of this hard-packed dirt is off limits to kids because it is difficult for teachers and aids to supervise, and thus completely wasted space. The remaining areas are divided between older play equipment, newer play equipment and asphalt areas devoted to basketball, tetherball and the like.
Site Layout
The school itself stretches along the northern and western sides of the block, with the parking lot filling out the northern side, and the school grounds occupying the remainder of the block to the east and the south. The whole block is ringed with a combined sidewalk, curb and gutter. The building is set back approximately twenty five feet from Vallejo and Colorado, but the diagonal distance from the building to the southeast corner of the grounds ranges from 380 feet to 500 feet approximately. The school grounds do indeed seem expansive. For safety reasons, the students of the school are not permitted out past a certain point on the expanse. Similarly, students are not allowed to utilize the grounds west of the southeastern corner of the school because they can not be monitored adequately from the main part of the grounds. The main entrance to the building is on the west side, with a few simple bushes and a flag pole the only adornments. A secondary entrance and a service entrance are found on the northern façade, along with the connection to the parking lot. The lot stretches to the east of the school along Colorado, with an entrance mid block on Colorado, and an exit just south of the Colorado and Tejon intersection.
Map 2: Existing Layout and Conditions
Table 6: General Surface Areas (see map for location)

<table>
<thead>
<tr>
<th>Surface</th>
<th>Area in square feet</th>
<th>Percentage of site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>65,494</td>
<td>23.7%</td>
</tr>
<tr>
<td>Concrete</td>
<td>14,729</td>
<td>5.3%</td>
</tr>
<tr>
<td>Building</td>
<td>35,938</td>
<td>13.0%</td>
</tr>
<tr>
<td>Soft Surface</td>
<td>14,982</td>
<td>5.4%</td>
</tr>
<tr>
<td>Dirt Field</td>
<td>113,720</td>
<td>41.2%</td>
</tr>
<tr>
<td>Misc.</td>
<td>3,463</td>
<td>1.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>276,296</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

Source: Denver Public Schools

Asphalt Areas

The asphalt areas at Schmitt are extensive, comprising nearly 24% of the site. The asphalt is divided into two areas, divided by a patch of grass turf. An asphalt apron of the playground extends to the east of the building, with a concentrated island of older playground equipment filling part of the expanse. Hopscotch, and wall ball paint marks decorate the inner apron, and the paint is newer and defines the game space clearly. Unfortunately, the quality of this asphalt
is poor, with numerous cracks and irregular, uneven areas. The large asphalt expanse east of the school and south of the parking lot is in better shape. This large area is divided between tether ball poles, foursquare and four basketball hoops. The foursquare boxes are in good condition, as are the basketball courts. The hoops are divided into two half court hoops and a full court with hoops on either end. The hoops are all ten feet high, and the asphalt play surface is in good condition. The tether ball poles do not have any tether balls attached to them currently.

**Playing Fields**

The fields at Schmitt are expansive, filling up over forty percent of the site. The area is divided with four baseball backstops, though they are in poor repair and do not include spectator seating, or dugout benches. The surface of the fields is exclusively hard packed dirt, though there is a small area of grass separate from the wide open fields. The dirt fields present wide open areas, but little in the way of safety or protection against injury. Indeed, many kids mentioned that they don’t like playing on the dirt fields because of the propensity for kids to get injured on the unforgiving surface. Furthermore, the dirt area directly south of the southern portion of the building is off limits to students due to the limited ability to supervise the area.

*This large dirt expanse leaves plenty of room for improvement*  
Source: Ian Bates
Concrete Areas
The main concrete areas on the site are found at the main entrance along the western edge of the building. The extent of the concrete is minimal, and is not contained with any landscape elements, benches or walls of any type. There is one bench near the main entrance doors which is in poor repair.

Playground Equipment
The basketball courts are separated from the large play structure to the south by a three foot chain link fence. This large play structure is relatively new, and in good condition. There is an assortment of slides, platforms and climbing implements, all in turquoise and white. Several meters further south there is a newer swing set, with eight swings contained in four bays. This newer equipment is in good condition, is well maintained, and is surrounded by good amounts of pea gravel. In contrast, the equipment found closer to the building is much older, poorly maintained and presents multiple safety hazards. The large metal slide has a southern orientation, and is not shaded. The swings are crowded, and dangerously close to a low chain link fence. The dome shaped jungle gym presents entrapment hazards.
Generally, the children seem to make do with what they have, creating games and taking advantage of the equipment present. Many kids enjoy playing chasing and running games around the play elements, although this has become too dangerous and therefore banned by the school staff.

Vegetation
The northern and western strips of landscaping between the streets and building façade are simple and straightforward. Expanses of lawn are punctuated by three mature Silver Maples along the west, a Blue Spruce at the northwest corner, and several smaller deciduous trees along the north. That is the extent of the vegetation. There is no vegetation at all on the playgrounds in the back of the school. This also means that there is absolutely no shade on the playground what-so-ever.
Pedestrian Access
Pedestrian access to the play areas of the school is somewhat limited. Access from the southeast corner is available, though is not readily apparent or particularly inviting. Similarly, access from the sidewalks just south of the building and just east of the building is somewhat hard to see from a distance. Pedestrians must be directly next to the fences to ascertain whether entry is possible at all. The vast size of the fields also discourages pedestrians from entering the site in a meaningful way.

Handicap Accessibility
Access from the building to the playground areas consists of several double door entrances from the gym, and several two door entrances from the remainder of the building. The gym entrances also include sets of three cement steps, while the exit from the southern end of the main hallway includes a large set of wide cement steps on the exterior. Handicap accessibility is very limited, with only one acceptable exit from the building to the playground.

Vehicular Access and Parking
On the north side of the site, along Colorado, there is a small parking lot that includes 49 parking spaces plus two handicapped spaces. According to DPS parking standards, Schmitt
requires approximately 47 parking spaces. While the need may not be critical at this point, the potential need for additional parking in the future should be noted. The lot is a one way lot, with entrance mid block on the north and exit just south of the Colorado and Tejon intersection. There is street parking along Vallejo and Colorado. The service entrance utilizes the same parking lot as teachers, staff and visitors. From the parking lot there pedestrians walk around through the delivery zone, to a side entrance, or around the corner to the main entrance. This is not the ideal relationship between service entrance and parking lot, but the alternatives seem scarce and difficult to implement.

Drainage
Drainage on the site is fairly good, with a gentle and constant slope to the southeastern corner of the site. The elevation change from northwest to southeast is sufficient, but there are currently areas with inadequate drainage, namely the sandbox to the east of the newer play equipment.

Poor drainage incorporated in play  Source: Ian Bates
Possible Needs and Opportunities

Based upon site and neighborhood observation and analysis, many possible needs and opportunities seem clear. Given the desert-like quality of the grounds, the primary needs as determined by this observer, are grass, trees, bushes and other vegetation. Grass would provide a safe playing surface for games such as football, soccer and baseball; as well as unstructured, safe running and chasing games. Moreover, the flat play areas are so vast that it would be unthinkable not to utilize this resource to the fullest extent. Additional vegetation in the form of shade trees seems to make sense throughout the site, especially along the south side of the grounds. The trees would serve the dual purpose of dividing the area from Jewell Street as well as providing shade during the hottest months of the year. Moreover, the underutilized area in the southwest corner of the grounds seems to be an ideal location for a community garden or a school garden; perhaps a combination of the two.

Beyond the dire need for vegetation, the playground areas need to be updated and reconfigured. The vast majority of the older play equipment should be removed, as it is unsafe, underused and downright boring. In its place, there could be a separate section for ECE play, as well as a separated area where more exciting play equipment for the older kids. The relatively new play structure and swings could remain, as they are appropriate for the middle grades that attend Schmitt. This is especially true given the limited budget that the project must contend with. Similarly, the asphalt areas that are currently devoted to basketball, tether ball and other games are largely effective, and should probably remain, with a simple face lift to make them more exciting and colorful. The observations and attendant suggestions made above are largely in line with the stated needs and desires of the constituents as ascertained through surveys and conversations.

Glorious shade  Source:Google images  Newer play equipment  Source: Google Image
Part II: Community Desires

“A Grass field is a simple and universally desired element” Source: Google Images

“Simple play areas provide structure and direction. Adding complexity encourages children to make choices and play in unpredictable ways. If we want to provide children with spaces and activities to better meet their individual needs and to facilitate their learning through play, creating both simple and complex environments is important.”

-Stine, 1997

The needs and desires section of this report is based on an array of methods and information sources. Inferences from the characteristics of and amenities found in the surrounding neighborhood began the process. Direct observation of the site, including a safety assessment, and observation of children playing was the next step. Information and opinions from the school staff and teachers were noted and included. The bulk of the needs and desires come from a multitude of surveys, questionnaires, writing assignments and pictures. Hundreds of visual preference surveys and simple written surveys were collected from a large portion of the students at Schmitt. Additionally, dozens of visual preference surveys and questionnaires were collected from parents, teachers, and staff.

Reiteration of the constituents

The constituents of the Schmitt master planning process are the students, their parents and families, and the teachers and staff of the school. The neighborhood surrounding Schmitt is
largely made up of younger families with children who attend Schmitt. Thus, the community and those directly tied to the school are one in the same.

**Constituent Needs and Desires**

My introduction to the needs and desires of the constituents came from Gaynell Lawrence, the Principal, and Lucinda Velasquez and Aubrey Duran, the current and former Presidents of the PTA, and devoted parents of children attending Schmitt. Mrs. Lawrence has spent her entire career as a DPS Principal at Schmitt Elementary and is admired and revered by students, faculty and parents. Her vision and hard work has largely driven the process of getting Schmitt on the list of schools that are to develop new campuses. Her ideas incorporate learning opportunities, elements that develop school and community pride, as well as multiple tie-ins to the specific academic programs and goals of Schmitt Elementary.

Mrs. Lawrence would like to see outdoor learning areas in many forms, including quiet reading areas, gardens, covered gathering places and play elements that are also educational, such as large rocks and sidewalks with educational inlays. Two specific programs that Mrs. Lawrence would like to see incorporated in the outdoor play areas are the school’s strong commitment to reading improvement, and the unique outdoor education programs that various grades participate in. Nature based education starts early at Schmitt, with a trip to Genesee Park in the foothills west of Denver in the 3rd grade. During their 5th grade year students spend a few days at Balarat, the Outdoor Laboratory School for Denver Public schools. The series continues in the 5th grade when students spend time learning about Southwestern Colorado, capped by a unique fieldtrip to Mesa Verde and surrounding areas. These programs offer many opportunities for curriculum tie-ins integrated into the learning landscape on the school grounds.
Preference Surveys and Questionnaires
In addition to the powerful visions of the respected leaders of the school, the students, faculty and parents have played a very active part in identifying and vocalizing their wishes as well. Over three hundred visual preference surveys and over two hundred written questionnaires have provided valuable information regarding the concerns and dreams of the constituents. The surveys completed by the students, teachers, staff and parents showed clear preferences and congruency between the constituent groups. The top seven choices were nearly identical for all groups. The top preferred element overall was the outdoor classroom. The rock climbing structure was a close second for the kids, but was not ranked as highly by the adults. Conversely, the picture of the chess table ranked very high in the adult surveys, and not quite as high by the kids. The remaining top choices by all groups included the shade structure, basketball courts, grass fields and play equipment.

Source: Lois Brink, CU Denver
The written questionnaires fortified the information provided by the preference surveys, and put specific words and ideas to the simple preferences identified visually. The children provided surprisingly sophisticated views on the current and potential use of the playground. In addition to the laundry list of desired equipment, students identified their social and emotional needs in relation to their outdoor world. Many kids linked the desire for a harmonious and conflict free environment to the need for a variety of age appropriate activities and safe playing surfaces. Additionally, students identified their need for relaxing, quiet, shaded and calming places as well as exciting and stimulating play elements. Lastly, the desire for colorful vegetation and play equipment was very apparent.

The needs and desires stated by the parents and staff showed amazing congruency and in many cases deference to the needs and desires of the children. This echoes the generally supportive feeling that I felt during interactions with parents and teachers. Many parents realized the vast amount of wasted space as well as the amazing opportunity that the large campus at Schmitt presents. Many parents were also concerned with the safety of their children in several different capacities. Bullying and injuries from poorly maintained equipment or hard surfaces were the most often cited concerns. Like the children, the desire for grass, age appropriate play equipment and a wider variety of play opportunities was voiced across the board.

Safe and exhilarating simple spaces  Source: Google Images
Quotes

Parents:
Que no te gusta del area de juegos de la escuela?
“Se mira triste como un desierto.” - Blanca Levario

What do you like about Schmitt's play-ground?
“Not a thing,… well there’s lots of room.” - Jordan Valdez

Students:
What don’t you like about the playground?
“I don’t like the field because it doesn’t have any grass, just in case we get hurt.”
-Anonymous

“What I don’t like about the playground is the open field because we can have other things than an open field.” -Anonymous

What would you like to see on the playground?
I would like to see in the playground is a really curly slide that is so tall that only 4th, 5th, and 3th grade can get on it. -Anonymous

Artist: Sauna, Schmitt Elementary
Table 7: Preference Survey Tabulation

<table>
<thead>
<tr>
<th>Element</th>
<th>Teacher</th>
<th>Parent</th>
<th>Staff</th>
<th>All Adults</th>
<th>Top Ranks</th>
<th>Students</th>
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<tbody>
<tr>
<td>Tetherball</td>
<td>**</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Shade Structure</td>
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<td>8</td>
<td>20</td>
<td>2</td>
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<td>Basketball</td>
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Source: Ian Bates
**Simple outdoor classroom**  Source: Google Images

**Table 8: Summary of Needs and Desires**

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<tr>
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<th>Parents</th>
<th>Students</th>
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<tbody>
<tr>
<td><strong>What They Like</strong></td>
<td>Spaciousness, newer equipment, basketball courts.</td>
<td>Tether ball, basketball, monkey bars, swings, cheese house.</td>
</tr>
<tr>
<td><strong>What They Dislike</strong></td>
<td>Old equipment, bullying, wasted space, poor supervision, hard surface, no equipment for small kids.</td>
<td>&quot;Cheese house&quot;, fences in playground, hard ground, fighting, old swings, lack of grass, bullying, rocks on cement, sand.</td>
</tr>
<tr>
<td><strong>What They Want</strong></td>
<td>Stuff for bigger kids, grass on the field, clean grounds, picnic tables, more color, trees.</td>
<td>Grass, not to hurt themselves/ each other, to be stronger and faster, shade, water, ways to beat the heat, swings, benches, being up high, flowers and trees, curvy slides, colors, big slides, tall elements, variety, good balls &amp; equipment, reading areas, soft ground, skating areas, scooter areas, outdoor eating, cleaner grounds.</td>
</tr>
</tbody>
</table>

Source: Ian Bates
Master Planning Collage

As part of the master planning process, the author created a collage representing the people involved, the site, the planning process and the visions for Schmitt. The lower third of the collage is black and white, with noticeably ‘outdated’ scenes, ideas and portrayals; representative of the outdated and worn out nature of the Schmitt campus as it stands today. The remainder of the collage represents the process the school has embarked upon to create a new and positive outdoor environment for their children and the wider community. The colors echo the fantastic and colorful visions that the students and community have for the space, while the imagery is meant to evoke the wonder and beauty of nature populated by shining faces. The smaller images of people represent the parents, staff, faculty and students, united in a circle around a central figure. The smiling face in the middle represents the Principal of the school for the last eleven years, Gaynell Lawrence. It seems that she has drawn the school community together and lead them in the right direction; ever upwards. Mrs. Lawrence has announced she will be retiring at the end of the 2004 school year, and vows to stay involved in the process of school renewal as it is passed along to the circle of supporters, and the new principal. At the top of the collage are some of the most important goals of the community for the future learning landscape on the Schmitt campus, including safety, health, growing and dreaming.

Source: Ian Bates
Part III: Vision and Goals

Vision
The overall vision for the Schmitt Elementary playground is the product of strong leadership, meaningful community and school participation and personal insight. The vision for the project as a whole started with the universally respected Principal, Gaynell Lawrence, and took off from there with the help of the faculty and several highly involved PTA presidents. The outcome has been a strong vision of a playground that is safer, more engaging and connected to the children’s needs, desires and curriculum. All parties involved have expressed the desire for a more lively, and safe playground as well as learning and recreation opportunities for all students and community members.

Goals
The following goals and possible methods of fulfillment represent an amalgamation of ideas, opinions and opportunities for the future of the school and its constituents. Many of the goals and methods are overlapping and mutually supportive.

- Create a safe playground
  - Provide grass on the field
  - Remove dangerous equipment
  - Provide plentiful play opportunities, divided by age and ability level
  - Avoid problematic adjacencies
  - Provide shade for play areas with trees and structures

- Create a more engaging playground
  - Drastically increase the variety of elements
    - Include nature in many different forms
    - Provide opportunities for more passive play
    - Add play equipment for more varied age groups
  - Include educational elements
    - An outdoor classroom, possibly combined with shade structures or gardens
    - Create gardens that echo the curriculum, and present opportunities for new curriculum tie-ins
• Focus on the specialties and strengths of Schmitt, i.e. the Mesa Verde program, and the focus on reading and language proficiency

• Utilize the vast spaces more efficiently
  o Incorporate elements that can be used during school hours as well as after school hours, and during the summer
    • Shade structures and picnic tables
    • Benches and spectator opportunities around the fields
  o Make changes to allow use of the entire field area
    • Consider creation of elevated areas that allow monitoring of the whole play area
    • Utilize the southwest corner of the site as a separated garden open to the community and the school
    • Provide grass on the field to encourage use by full sized soccer, football and baseball teams of all ages

• Provide opportunities for use by entire school and community
  o Develop adjacencies and view corridors that allow all age groups to play and socialize within sight of one another
  o Provide a centralized gathering place that includes shade, tables and sitting areas
  o Allow fields to be accessible and visible from all sides of the recreation area
  o Develop gardens that can serve as community gardening areas, as well as educational tool for school
  o Provide signage throughout learning landscape elements that promote self-directed learning for community use during non-school hours
Realizing the vision, fulfilling the goals
The master planning process undertaken by the CU Denver School of Architecture and Planning, in conjunction with the students, faculty and community members involved in Schmitt Elementary is designed to be the first concrete step turning dreams and ideas into reality. The vision and goals are combined with site inventories and safety assessments to develop a list of program items, possible future spatial relationships for the landscape as well as a detailed budget estimate. These elements, along with the rest of this master plan serve as a base from which a design professional will work if and when the project proceeds.

Programmatic list
Based upon the needs, desires and goals of the constituents, tempered by budgetary analysis, arises a detailed wish list of elements to be included in the completed Learning Landscape at Schmitt Elementary.

- Vegetation
  - Turf playing field
  - Trees
  - Bushes
  - Butterfly Garden
  - Southwestern Cultural Landscape
  - Xeric vegetation
  - Community Garden

- Community/ School Gathering Places
  - Shaded plaza
  - Shade structure
  - Picnic tables (3)
  - Trash cans (2)
  - Benches (2)
  - Outdoor Classroom
  - Game tables
- Manufactured Play Equipment
  - Intermediate play structure (4th-5th grade)
  - ECE play structure and separate play pit
  - Swings (10)

- Natural Play Elements
  - Boulder Field
  - Berms facing turf field and play areas
  - Crusher fine path around field
  - Animal tracks in cement

- Artistic/Enlivening Elements
  - Gateways and banner poles
  - Sculpture of kids playing in front of school
  - Kids tile project
  - Newly painted primary equipment

**Spatial relationships**

**Aesthetic ordering systems**

Aesthetic ordering systems are organizing concepts that provide inspiration and guidance to the physical layout or design of a landscape. The two sources of inspiration for this master plan were Washington Park in Denver, and Cliff Palace in Mesa Verde National Park. Washington Park was chosen because of it is one of the largest, most successful public parks in the city. Mesa Verde was chosen because of the 5th grade program that Schmitt has developed.
Washington Park has a strong aesthetic ordering system, with two lakes and a large open field surrounded by long loops for park users. The lakes and the field serve as large focal areas, with many additional use areas around the edges of these focal areas. Picnic areas, playgrounds, gardens, basketball hoops, tennis courts and several buildings create nice spaces for users of many different backgrounds, with many different interests. On a busy day you often have park goers that are there for dozens of different reasons, all using the same park, and occupying many different spaces. On the edges of the park, between the main asphalt loop and the surrounding streets there are more natural areas, with many large trees. These areas are well used by patrons, and also serve as a buffer between the majority of the park and the traffic on the streets.

Many of these spatial arrangements fit the goals and physical potentials of the Schmitt campus. It is imperative that the Schmitt site includes arrangements that allow for a wide mix of simultaneous uses. Moreover, buffering, and large open play fields surrounded by more intensive elements are also ideas easily applied to the Schmitt site. A path for running and walking, as well as the incorporation of gardens are also very desirable and easily workable on the Schmitt site.
The existing cultural, and educational connections between Schmitt Elementary and the Mesa Verde site provide a unique opportunity to further integrate the connection through design inspiration. Mesa Verde is a beautiful and unique group of dwellings built over 600 years ago by the Anasazi Indians in southwestern Colorado, and lends itself easily to design inspiration. The dwellings themselves were an ingenious response to the pressures of climate and social strife. The handful of settlements perched in the cliffs were protected from raiding tribes living nearby, as well as the harsh winds and intense sun found on the canyon rims. The idea of creating a safe haven, sheltered, though not isolated from, negative social outcomes and the elements transfers quite nicely to the Schmitt campus. Moreover, the way in which the dwellings are backed up against a semicircle of solid rock is not unlike the play areas at Schmitt being backed up against the embracing L of the school building.
The layout of the parts of Cliff Palace relative to one another is also appropriately constructive. The parts are arranged in direct response to site constraints and opportunities, and built over generations according to what made sense. The wholly organic nature of the arrangement can easily be mirrored on the Schmitt grounds to produce a free flowing landscape of gathering, playing and quiet spaces, minimally constrained by strictly orthogonal patterns.

More directly and literally, elements of the ecological landscapes of the area would work quite well in surrounding and reinforcing the ideal of meditative or spiritual spaces, in this case in the form of an outdoor classroom. An ecological or cultural landscape echoing the southwest would be both educational, and environmentally appropriate given the xeric nature of the Denver metro area.

Circular movement of the heavens, as seen from Mesa Verde N.P. Source: Google Images
The numerous elements of this master plan are combined here in a graphical form laying out proposed spatial relationships between the varying elements desired for the site. The goals of the plan are fulfilled in many different ways illustrated by the pieces of the puzzle assembled on the site. The overlapping nature of many pieces, goals and outcomes necessarily makes a linear explanation a bit difficult, so it is important to remember the almost ecological nature of a learning landscape, where everything is connected to everything through a complex web of interactions.

Possibly the clearest way to explain the landscape elements and their relationships is starting at the school and working outwards. As you leave the school wall behind, heading to the east and south, there is an apron of asphalt in both directions. This is the area that receives the most traffic, day in and day out, and is therefore a good places for asphalt based games like basketball, tetherball, wall ball, jump rope, and hopscotch. The patch of grass that used to occupy a small section near the building has obviously been replaced with asphalt, and fresh paint, as well as a whole school yard full of new vegetation. The first and most prominent examples of this vegetation are the two trees that have been planted in round, slightly raised planters. In no time these trees will provide shade to a busy section of hot asphalt, a nice gateway feel to the playground, and a popular place to sit around for all ages.

A tongue of asphalt snakes between the planter trees, past a bench or two, and opens up into many possibilities. To the left is the very large play pit that contains the older, though repainted, play structure for essentially all ages. The swings that were put in a few years ago remain, flanked on the east and west by some smaller, new play pieces.
Beyond the play pit to the east (away from the building) are a set of new swings, backed against the fence so that they are functionally separated, and therefore safer for all involved. To the left of these new swings are the pre-existing basketball courts and tetherball poles, with a new layer of asphalt, and freshly painted game lines, with fun colors this time.

To the other side of the play pit is a long, linear, concrete walk connecting a gateway along Tejon Street with the central asphalt tongue. This gateway serves as a primary community entrance pulling people through the large expanse of the site into the heart of it, where families can gather. Passing through this gateway from Tejon you pass small fields of boulders on either side, similar to the two trees you pass through from the school side. These boulders are generally populated by the older kids, a little farther away from the school, out in the part of the playground where those testing their independence like to go. Luckily areas like these are still quite easily monitored from the more centralized, raised portions of the site intended for good views of the whole site, including the field, all play pits, and the outlying berms and gardens.

The raised concrete plaza near the heart of everything is well covered by a shade structure, and is the focusing point of the whole landscape. It is the point that where you look out from, and look over and up to. This allows the area to be used as a community gathering point, with tables and shade, as well as a stage for any type of event, school or community related. Think small family skits, awards ceremonies for sports or a springtime carnival grandstand. The plaza overlooks a large grass field to the east, and a small gathering area towards the building.

On either side of the plaza are two new play structures, one for older kids towards the building, and one for ECE kids, a little further from the more rowdy heart of the landscape. The two new structures, each in their own play pit with Engineered Wood Fiber fall surface, are flanked by vegetation on at least two sides. Indeed the planter full of bushes and flowers next to the ECE structure is designed to attract a variety of butterflies. Though it is ringed by a short chain link fence, the ECE pit is also buffered from errant soccer balls on the field by a small berm covered in turf. This hill also allows for a nice sloped spot for potential spectators of whatever activity is happening on the large grass field, or around the track encircling the field. Indeed the field is at least partially encircled by spectator hills on all four sides. Each gentle hill serves to buffer various elements to some degree, while offering play opportunities by...
themselves, in addition to providing informal seating around the field. The larger hills to the east and south are planted with more xeric grasses and trees, creating more ‘natural’ or ‘wild’ vegetative areas on the site. At the southeast corner of the site the subtle entry through the fence remains, with a few banner poles lending a little more ‘you are somewhere special’ feel to the entrance. The hill that stretches along the southern boundary of the landscape turns towards the building enough to buffer the outdoor classroom from the relatively active field and ECE play pit.

The simple classroom is hugged on the other side by the uniquely planted cultural landscape that attempts to mirror the ecology of the southwestern forests found near Mesa Verde National Park. The landscape is both educational and aesthetic, not to mention quieting and relaxing. Just to the west of this landscape is one possibly more suited to the canyon bottoms of the Anasazi southwest, a cultivated garden. This section of the site is the only part that is not very contiguous with the site, and is therefore put to good use as a learning and community building garden jointly managed and worked by the school and members of the community. It provides a second, less formal outdoor classroom for all students of nature, beauty, health and life.

**Final Thoughts**

Up to this point, the process of bringing new life to the Schmitt Elementary campus, and the surrounding community has been a slow and sometimes frustrating process for those who have been involved over the years. It is the author’s opinion that the ball is now rolling, and the continuing commitment of the parents, faculty, staff and students of the school, as well as the involvement of CU Denver students and faculty will allow this project to be eventually realized in a way that this community wants, and truly deserves.
Appendices

Appendix 1: Site Inventory and Safety Review

Appendix 2: Cost estimate spread sheet

Appendix 3: Original CAD drawing of the Schmitt campus