Master Plan for Sabin

A LANDSCAPE MASTER PLAN FOR ELEMENTARY SCHOOL IMPROVEMENTS

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Learning Landscape Program
University of Colorado at Denver
Spring 2004

Master Plan For
Sabin Elementary School

Prepared For: Denver Public Schools
Sabin Elementary School
3050 S. Vrain St.
Denver, Colorado

Reviewed by _____ , _____
Principal, Sabin Elementary date

Reviewed by _____ , _____
CSC Representative date

Reviewed by _____ , _____
P. M., DPS Facility Management date

Reviewed by _____ , _____
Grounds Supervisor, DPS Facility Management date

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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.

> *"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.

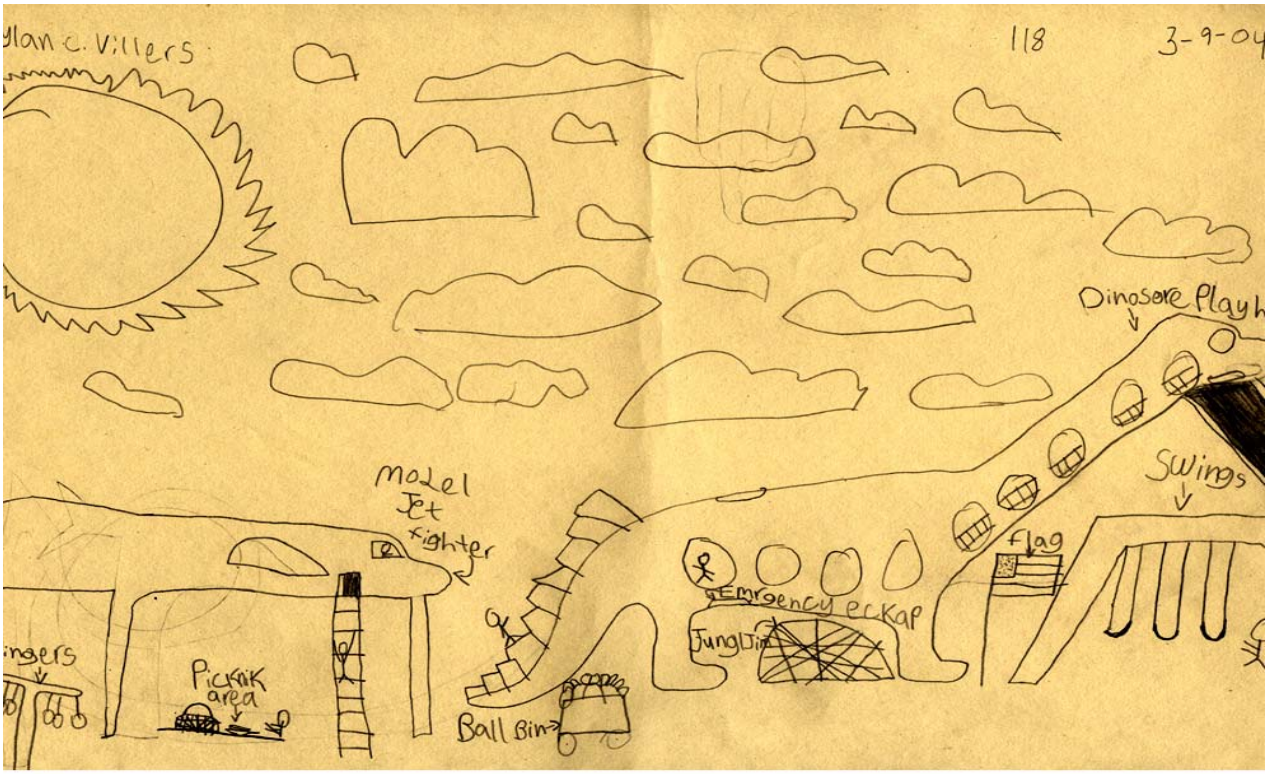
The Solution

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.



"We should seek the atmosphere and surroundings that call forth the best that is in us."

-Councillor

Part I: Assessing the Present Situation

The Location

Sabin Elementary School is located in southwest Denver and serves the Harvey Park South and Fort Logan neighborhoods. These neighborhoods are bordered by Federal and Sheridan Boulevard on the east and west, and by Jewell and W Belleview Ave. on the north and south, all of which are highly commercialized roads. There is a very sudden change from commercial area into residential once entering the neighborhoods.

In these neighborhoods one can find old, new, small, and large homes, apartments, as well as new developments, all displaying economic diversity. The streets are wide and comfortable to drive on. The neighborhoods contain worshiping facilities, parks, lakes, and schools, giving the area a unique sense of diversity.

Sabin Elementary School can be found off Sheridan Boulevard on the small, residential S. Vrain St. The school is bordered by one very busy road, W Dartmouth Ave., and is in the middle of a residential area, where the homes of Sabin students can be found.

Map 1: Sabin Elementary Location Map

http://www.mapquest.com/

History

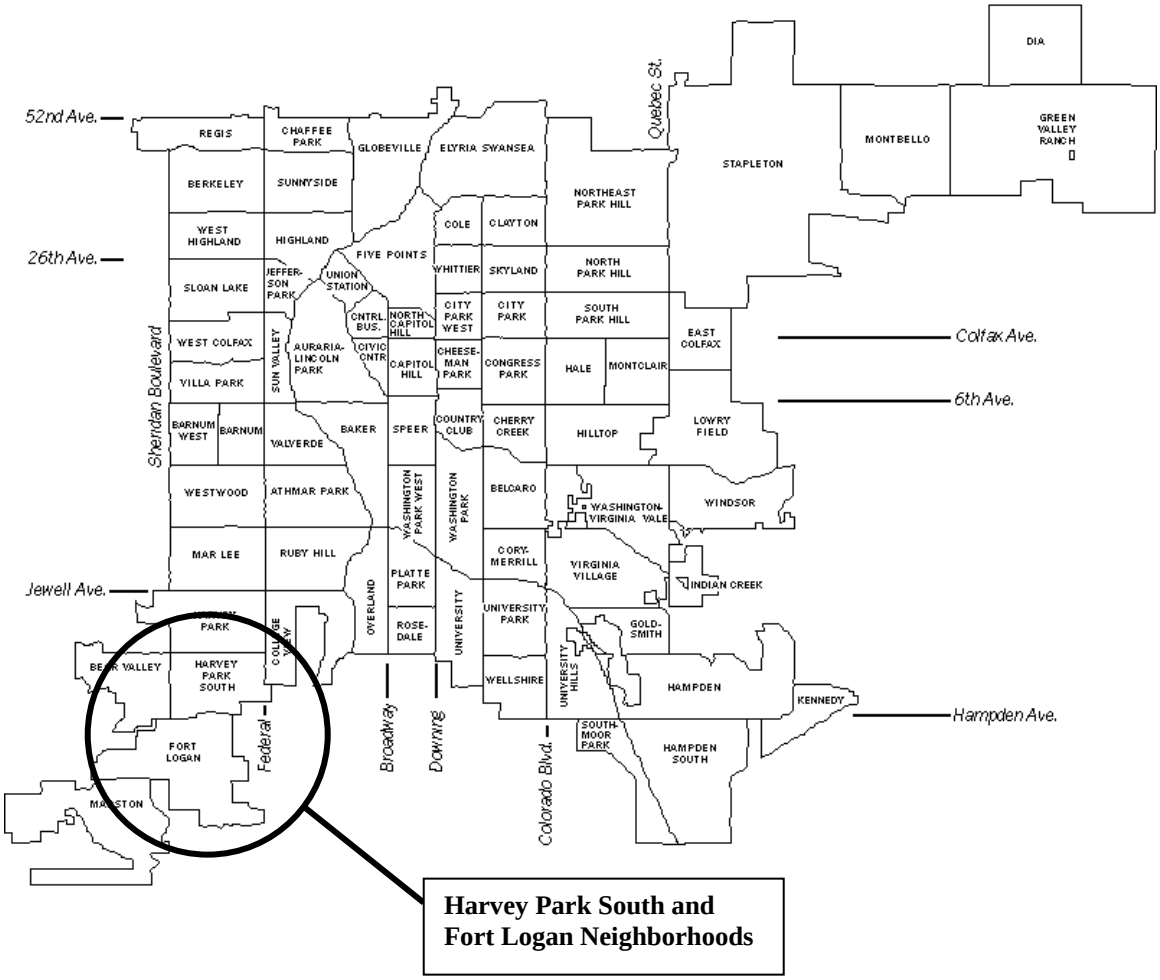
Sabin Elementary School is named after two sisters: Mary S. Sabin and Dr. Florence Sabin. These sisters both lived in Denver and both attended Smith College. Mary went on to teach math at East High School and was one of the founders of the Colorado Mountain Club. After graduating from Smith, Florence went on to Johns Hopkins Medical School and became the first woman to attain full professor there. She later became a chairwoman for the Colorado Committee on Health, passing what are known as the "Sabin Health Laws". Her statue now stands in Statuary Hall in Washington, D.C.

Sabin Elementary School opened in 1958 on February 17th. A ten-room addition was added in January of 1962, in 1997 grass, trees, and a sprinkler system were added to the playground, and in 1998 a commons area was added and the media center expanded.

Florence Rena Sabin

http://www.denvergov.org/AboutDenver/history_char_sabin.asp

The Neighborhood



Demographics

The residents of the Harvey Park South and Fort Logan neighborhoods are represented by several ethnicities. The 2000 Census results showed that the population of the community is approximately 25% Latino, 1.7% African American, 65% non-Latino White, 4.8% Asian/Pacific Islander; 0.7% Native American (source: The Piton Foundation). However, the demographics of the neighborhood do not exactly match that of the school population (see Table 1). In Sabin Elementary the largest ethnic population is Latino, with non-Latino White

as the second largest. This suggests an occurring turnover in the demographics of the neighborhood, complying with the growing trend in inner-city Denver: neighborhoods becoming increasing Hispanic in character.

The Constituents

There are currently 686 students attending Sabin Elementary, the maximum capacity being 720 students. Of the students currently enrolled in Sabin, 57% are accepted from School of Choice applications. The school serves students in the Early Childhood Education (ECE) program through sixth grade. During the 2002-2003 school year, about 48.5% of Harrington's students qualified for free or reduced-price lunch (compared to a district average of 68.4% of elementary students). 13.6% of the students are learning English as a second language, 9.9% of which are Spanish speaking.

Sabin is a year-round school which offers a wide variety of programs to their students such as English as a Second Language, Early Childhood Education, instrumental music, vocal music, gymnastics and chess clubs, and Odyssey of the Mind (art program). The school also has many programs to get the parents involved such as the Parent-Teacher Association (PTA) and Parents Education for Pre-School Students (PEP's).

Table 1. Sabin Elementary Demographics

Number of students	686	
ECE	≈30	
Kindergarten	≈120	
Grade 1	≈100	
Grade 2	≈100	
Grade 3	≈125	
Grade 4	≈100	
Grade 5	≈80	
Grade 6	≈27	
Teachers	43	
Paraprofessionals	16	

Ethnicity	Percent
American Indian	1.1
African American	4.2
Asian	5.3
Hispanic	58.6
White	30.8

Student Attendance 2002-2003

Average daily attendance	93.9%
Student suspension rate	4.8%

Percent of students who are English Language Learners 2002-2003

Total	13.6%
Native language is Spanish	9.9%
Native language other than Spanish	3.7%

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.

Table 2: Colorado Student Assessment Program 2002-2003 (CSAP)

2001 Totals (percent proficient)	Grade 3 Reading	Grade 4 Reading	Grade 4 Writing	Grade 5 Math	Grade 5 Reading
Sabin	67%	52%	33.3%	32.4%	48.7%
Denver Public Schools	55%	37.2%	29%	30%	41.2%

Students

The students at Sabin are very energetic, creative, and eager. They are more than willing to give input when asked, use their imaginations enthusiastically, and clearly enjoy being a part of any activity which is going on.

Staff, Teachers, and Parents

There is a highly qualified staff at Sabin. Dr. Linda Gordon has served as Sabin's principle for 9 years. 75.8% of the teachers have a masters degree or higher, and 67.7% have been teaching for 11 years or more.

Sabin also has a history of involvement from its parents, most likely due to all the programs offered by the elementary school. Parents actively participate in social events, academic programs, and fundraising projects.

Site Inventory and Safety Assessment

The role of a playground in a child's development is to provide for self-discovery – opportunities to dig and build. It is also a gathering place and fosters the building of social skills. The existing equipment does little to promote such an environment.

> *"The farther we are removed from environments and social relationships which we have known since childhood, the more we must rely on abstract communication and rationally directed activities. …Parts…which are actively shared by people with diverse cultural values and codes of conduct must be readily intelligible to all."*
>
> *- Barrie B. Greenbie*

Table 3: General Surface Areas		
Surface	Area (square feet)	Percentage of Site
Asphalt	92636.78	19.2
Playground soft surface	9620.94	2
Grass	225117.19	46.6
Concrete	35083.24	7.3
Building	85550.07	17.7
Misc. (walkways, landscaping, right-of-way)	50598.86	10.5
Total	483230.25	100

General Surface Areas

Sabin Elementary has a large recreational area. There are two newer playsets amongst older, metal play equipment. This area is on the south side of the building, set in pea gravel, next to Dartmouth Ave., separated by a fence and sidewalk. The pea gravel is compacted and causes poor drainage in the playground area. Directly next to one of the pea gravel areas is a sandbox and drop ball “basketball” goals for smaller children. There are a few large deciduous trees found on the outside border of the playground. While these trees provide some shade in the summer, there is no winter sun protection. There is a large asphalt area containing a wall ball court and several four-square courts, 3 basketball courts, and 4 tetherball areas. Unfortunately, this area is dotted with potholes. Behind the building, on the east side, there is a large recreational field “separated” into smaller fields (there are many softball backstops which allow separate and simultaneous use). This large, grassy area is bordered by a circular walking path.

Because there is so much area, the play/recreational area is spread out along the south and east sides and may be difficult to supervise. Also, there is a variety of equipment integrated into the playground with no apparent boundaries for play according to age.

Map 2: Sabin Elementary Site and General Surfaces

Playground Equipment

The playground equipment is located in two areas, separated by the basketball courts. However, while it is separated, the two parts are almost exact copies of each other containing similar equipment. In both areas there is a newer, plastic playground mixed in with older metal play equipment which consists of monkey bars, swings, rings, and a dome-shaped climbing structure. The playgrounds are covered in pea gravel with small, ill-placed, 1-inch mats in both areas. The swing sets also have 3 swings per bay, while current safety standards allow no more than 2 swings per bay. While there is equipment suitable for ECE, primary, or intermediate users, there is little or no separation of it

After completing the site inventory (see appendix) the playground can only accommodate 132, or 19% of the 686 children at a given time. This large under serving of the school population causes many children not to participate and causes contention over available equipment.

Playing Fields

Sabin has a large area designated to playing fields. There are a number of softball backdrops which separate this large area into individual fields. Most of

the area is covered in grass, except for one field which has dirt in the shape of a baseball diamond. The drainage on this area seems to be adequate, the only place where precipitation seemed to take a longer time to drain was in the dirt area. There is also an area in the recreational field designated as a soccer field, however, soccer goals are not set up at all times.

Recreational Field on east side of Sabin site
Source: Lauren Heesemann

Asphalt Areas

There is a large asphalt area between the two playgrounds which is in overall good condition, just needing a new overlay coat to improve it. This area contains 3 basketball courts, a wall ball court adjacent to the basketball courts, scattered 4-square courts, and 4 tether ball areas. There are also a few drop ball "basketball" goals for smaller children.

Basketball Courts on south side of building.
Source: Lauren Heesemann

Concrete Areas

The concrete areas around the building function as circulation corridors, mostly in the form of sidewalks, or walkways.

Vegetation

There is a lot of landscaping around the building and property of Sabin. The trees and bushes on the east side are very well groomed, while some other areas need some work. There are a few large, old deciduous trees bordering the playground on the south side.

Vegetation on east side of building
Source: Lauren Heesemann

Pedestrian Access

The grounds of the school are open to the surrounding neighborhood through openings in the fence. People have access to the playground, fields, and walking path which surrounds the recreational fields.

Handicap Accessibility

Accessibility is limited to the concrete play areas, and the playfields and playgrounds are not up to requirements. This is an urgent problem which needs immediate attention.

Vehicular Access/Parking

There is one parking lot with 72 parking spaces for teachers, faculty, parents, and visitors. This is also where students are dropped off in the morning by their parents, where deliveries are received, and trash is picked up. There are a lot of activities going on in the same place which causes congestion, lack of adequate parking, and causes one to question safety in this area.

Parking lot on west side of building
Source: Lauren Heesemann

Drainage

Drainage in the playground area is a problem. The constant removal of the pea gravel below the swings causes water to accumulate and is unable to drain. On the playing fields drainage seems to be slow in the area where there is only dirt. The northeast corner of the building accumulates water as well.

Surrounding Uses

The area is predominately residential comprised of homes from a wide range of economic levels. Some are well cared for while others are strewn with trash, some are single-family, while others are multi-family housing.

Survey of Community Desires

Students, teachers, parents, and community members were questioned to assess what their preferences were for the playground. PTA, faculty, and student council meetings/members provided the majority of learning landscape information and requests. Every group involved in this project was encouraged to voice likes, dislikes, and requests for current and future aspects of the learning landscape.

Photo Survey

The photo survey below was given to the teachers, faculty, students, parents, and community of Sabin Elementary. After looking at the pictures below, the constituents were then given a paper survey and asked to circle their 5 favorite pictures, or add their own suggestions as to what they would like to see in their Learning Landscape.

Results

Below are the first, second, and third tallied choices/group from the survey. It was interesting to see how the needs and desires differed according to constituent group.

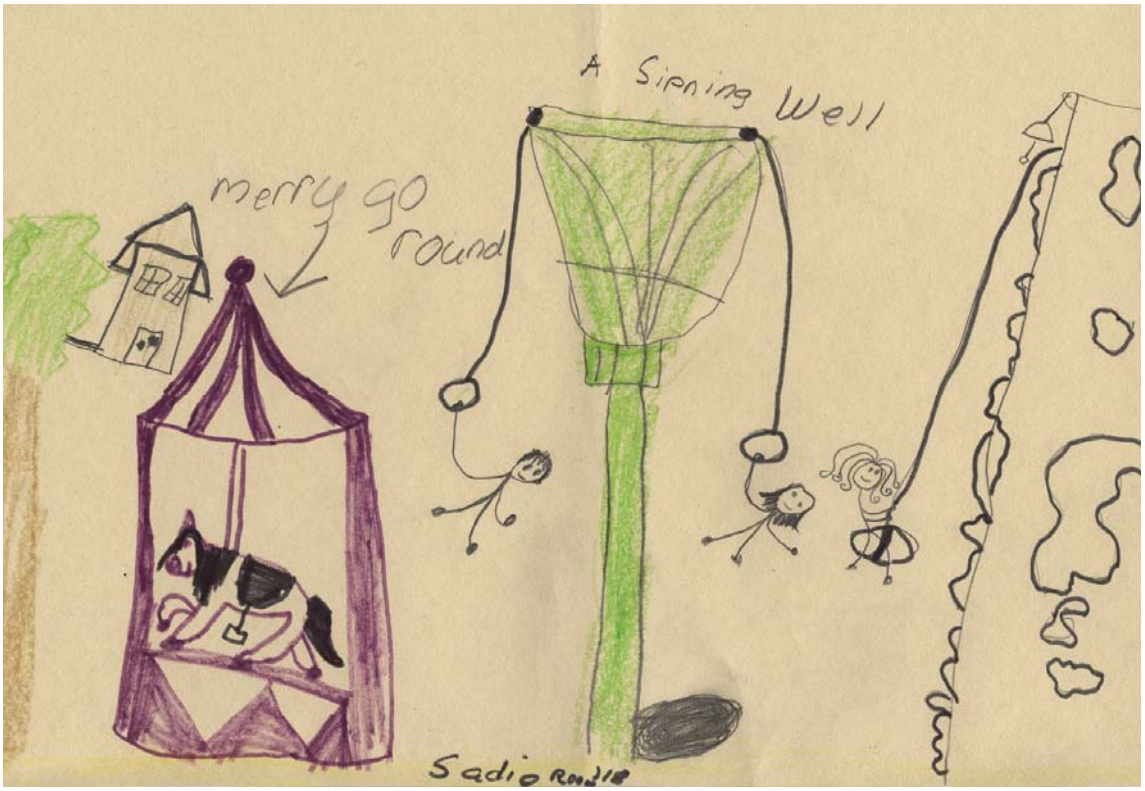
Table 4: Photo Survey Results

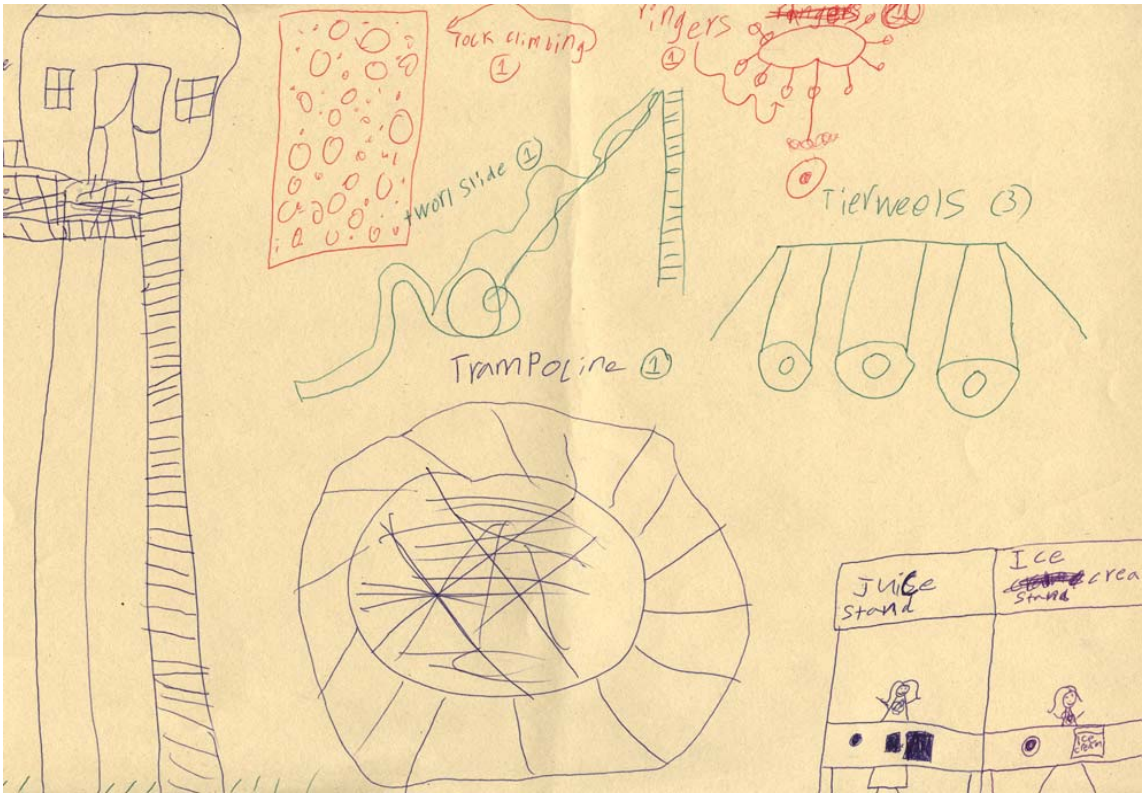
	ECE/ Kindergarten	1st	2nd	3rd	4th	5th	6th	Teachers	Parents	Community
1st Choice	17	17	19	19	11	17	17	19	17	17
2nd Choice	19	19	10	2	10	19	19	3	19	12
3rd Choice	2	14	14	16/14/10	14/19	14	14	16	9	2

Students

Student verbal requests included roller-coasters, swimming pools, and bungee jumping, but on the more practical side they asked for shade structures, climbing walls and boulders, an outdoor classroom, and more play equipment. Some

students also drew pictures depicting what their ideal future Learning Landscape would look like.





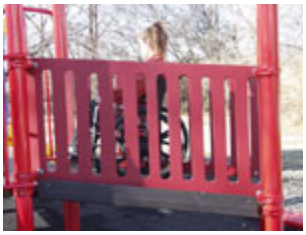
Parents/ Community

The parents and community members expressed the desire for more play equipment, shade structures, and a community garden.

Teachers

On the picture survey, teachers liked the outdoor classroom, shade structure, game tables, map, and more play equipment. They also expressed the desire for more parking and a solution to drainage issues. While all the teachers had input for the future of the learning landscape, none were as passionate as the special education teachers expressing the need for more handicap accessible equipment. They would like to see more playground equipment that is available to wheelchair-bound children: swings, game tables, etc.

http://www.jennswing.com/



http://www.outsidetoyspro.com/Products/productList.asp?DEPid=13&ROOT_dept=0&Start=12

Collage

This collage was inspired by Sabin's past, present, and future. Creating a learning landscape site which responds to the needs of an elementary school, as well as the surrounding community can be an overwhelming task, and trying to get the community, school staff, students, and parents involved is not easy either. However, once the project gets started and the potential is realized it becomes an exciting task. The endless possibilities, the excitement of the constituents, and the idea of having the ability to bring a school and community together is very inspiring. The collage ties the past, present, and future together by capturing the overwhelming beginning, the hard work involved to make the site become an effective one, the potential of the site, the excitement of the design process, and the bright future of Sabin's new learning landscape.

Part II: Visions and Goals

The purpose of the visions and goals is to demonstrate how all the components which have been discussed so far have influenced, and will continue to influence, the design of Sabin's Learning Landscape. The visions and goals are inspired by the desire to improve the current Sabin site, as well as trying to fulfill the constituent needs and desires. The components of Sabin's future Learning Landscape will enhance the social, physical, and academic education of each student, while acting as a place for the community to recreate and gather.

The Components

Vision

The new Sabin site will be a place which functions well as both a school and community gathering place, so that it draws a multitude of people to use it and provides a rewarding experience for each person.

Goals

- To create a landscape which enhances learning through physical and interactive play.
- To offer the opportunity for all of Sabin's constituents to use and enjoy the landscape, especially those who are physically challenged.
- To provide a gathering place for the surrounding neighborhood
- To use the landscape to provide insight into Colorado's geography, environment, and geology, so the landscape can be used as a learning tool.

Elements

Play Area

ECE/ Kindergarten Play Area (partially existing)
ECE/Kindergarten Hill
Primary Play Area (existing)
Intermediate Play Area
Swings- 8 in ECE area, 12 in Intermed. area (both containing standard and handicap accessible swings)
Basketball Courts- 3 (existing)
Hard Surface Play- 4-4square, 2 hopscotch, 4 tetherball
Wall Ball/ Mural
Climbing Boulders Area (Mimicking the Colorado “14ers”)

Gathering Areas/ Intellectual Play

Game Tables- 2
Outdoor Classroom
US Map
Shade Structure
Gateway

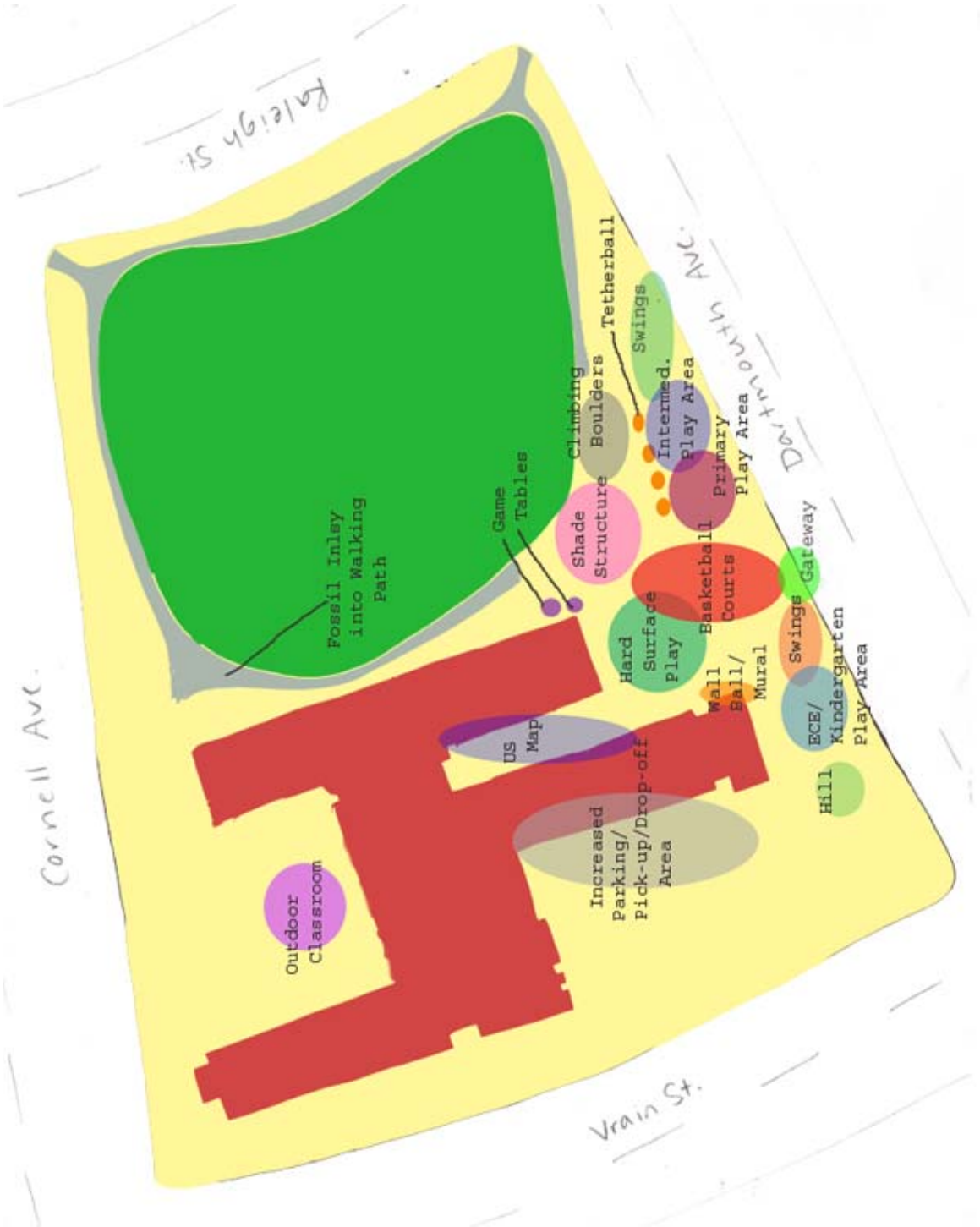
Other Additions/ Improvements

Increase Parking Area
Improve Drainage in Certain Areas
Rearrange Softball Backstops
Recreate walking path (add inlay of “fossils” found in Colorado)
Vegetation- 2 trees, 5 shrubs

Spatial Diagram

Using the information about Sabin Elementary along with the teacher, student, parent, and community desires from the photo survey, a spatial diagram was created which includes the elements which were mentioned above. This diagram shows rough idea of what may be included in the future landscape, as well as the location for the additions. There is also consideration of the flow of people through the area, as well as placement of equipment according to age.

Spatial Diagram



How the Goals will be Fulfilled

The vision statement states that the Sabin site will be a place which functions well not only as a school but as a community gathering place, offering a memorable experience for everyone. Every step that has been mentioned in the master plan so far has led to the creation of goals which will ultimately allow the vision to actually take shape and become a reality.

Goals

- **To create a landscape which enhances learning through physical and interactive play.**
  This goal will be fulfilled by offering adequate play equipment for the amount of children that will be using it. Through separation of ECE, primary, and intermediate play equipment, children are able to play with others their own age, on age-appropriate equipment which increases safety.

- **To offer the opportunity for everyone to use and enjoy the landscape, especially those who are physically challenged.**
  The addition of handicap accessible equipment such as swings, game tables, wheelchair friendly surfaces, etc. will fulfill this goal.

- **To provide a gathering place for the surrounding neighborhood**
  By providing appropriate equipment for people of all ages to go and participate in activity, as well as congregate and socialize, the site will become a gathering place for the community.

- **To use the landscape to provide insight into Colorado's geography, environment, and geology.**
  See organizational concept below.

The Organizational Concept

This design concept was inspired by the Denver International Airport, where the architecture of the building, both inside and out, reflects the unique geological environment of Colorado.

We live in a unique environment here in Colorado, and the geography of our state is responsible for the exceptional geology which surrounds us. Through design there is the opportunity to display pieces of this phenomena, giving insight into our environment and how it is formed. Optimistically, this will strike interest and the seed of desire to learn more about our environment will be planted.

http://usa.autodesk.com/adsk/servlet/item?siteID=123112&id=181724

Elements which respond to the Organizational Concept:

Shade Structure

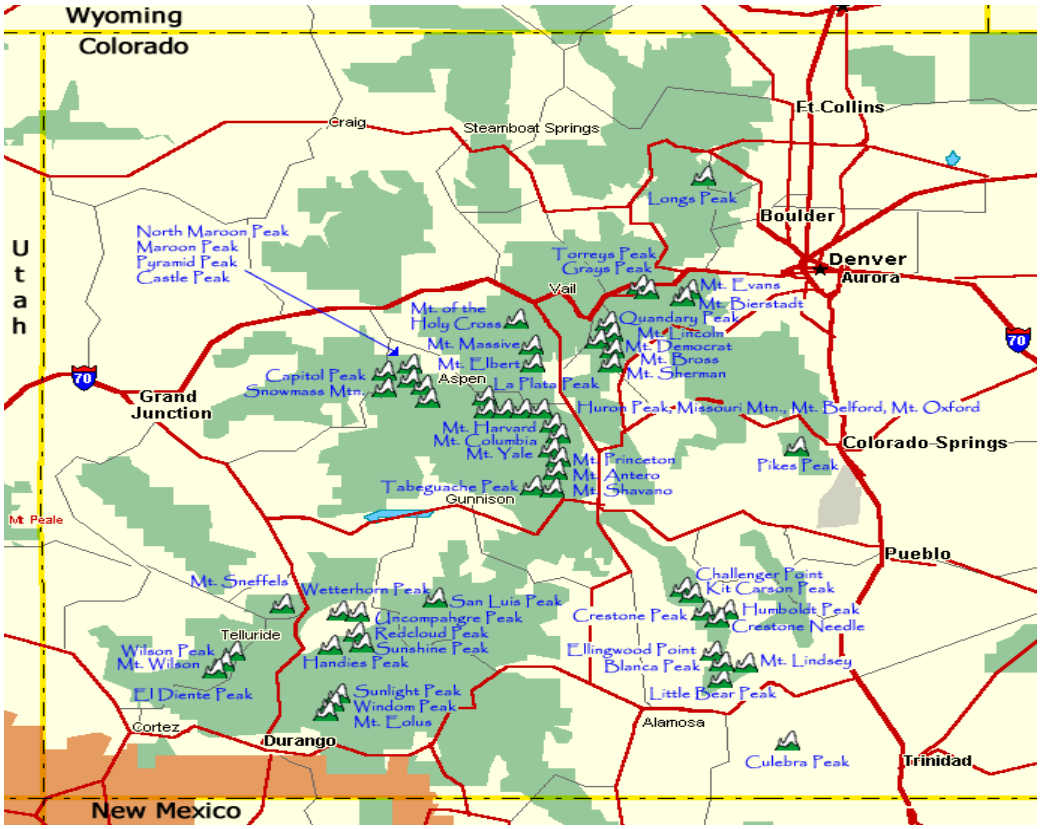
The shade structure will reflect the “peaks” of the Denver International Airport, using the Teflon material to mimic the snowcapped mountains of Colorado.

Map

The map will allow students to see their country and where Colorado is located in relation to the entire United States. This will help them grasp the geography of their state.

Climbing Boulders

The layout of the boulders will mimic the ranges of the “14ers” of Colorado. This will give students an opportunity to learn about the mountains of Colorado and where they are located.



http://www.14ers.com/14ermap.html

Walking Path

The changes which will be made to the walking path are also inspired by the Denver International Airport. Inside Concourse B there are a number “fossils” on the floor tiles. The tile shapes are made from polished precast concrete with cast bronze inlays. The “fossils” not only symbolize fossils native to Colorado, but depict ones that were actually found on the DIA site. As people pass through Concourse B they are welcomed to a new place while being introduced to the past which lies deep within the geology of the Colorado environment. The fossils inside the airport are embedded in rock and are buried well beneath the surface of the Teflon mountain tops.

Sabin’s new walking path will be recreated with inlays of fossils which are native to Colorado. This will not only allow students to “see” what was here before we were and give them an insight into Colorado history, but can be used to introduce the rock cycle and fossil formation as well.

http://www.itano.net/fossils/niobrara/niobrara.htm

http://www.paleocurrents.com/docs/douglas_pass.html

Playground Safety Site Assessment

Elementary School: Sabin
Address: 3050 S. Vrain Street
Inspector: Lauren Heesemann
Inspection Date: 2/9/04

Note: If any "NO" is checked for any of the individual site assessment issues, please provide detail comments on additional sheets of paper and attach to this report.

Item	Issues	Yes	No	N/A	Comments
A.	General Concerns				
1.	Can the playground be seen from the street?	X			
2.	Is the playground fenced off from the street, open water sources, ditches, etc?	X			
3.	Does the playground provide for wheelchair access?		X		
4.	Are drinking fountains present, operational, and clean?		X		
5.	Is the size of the playground equipment correct for the age group utilizing it?				There is not really any ECE equipment
6.	Does the playground have adequate site drainage?		X		
7.	Is the equipment free of vandalism?	X			
8.	Does the playground provide approved shade structures and/or trees?	X			some
B.	Ground Cover				
1.	Is fall protection, EWF (Engineered Wood Fiber), provided under all play equipment?		X		
2.	Is the loose fall material 12 inches deep?		X		
3.	Does the fall material extend at least 6 feet beyond the play equipment footprint?		X		
4.	Is the fall material non-compacted?		X		
5.	Is there a rubber mat present that is 1 inch thick for every 4 feet of equipment height?		X		1 inch thick mat under Stairs
6.	Does the fall material extend beyond the beam swing height? (1:2 Height to Distance Ratio?)				
7.	Is there a provision for keeping the swing area free of conflicting traffic?		X		
C.	Consumer Product Safety Commission (CPSC) Compliance				
1.	Are there openings present in the play equipment that are between 4 and 7 inches?	X			
2.	Are there any "V" shaped entrapments present in the play equipment?		X		
3.	Are there 38 inch high non-climbable tails on all raised platforms/decks?		X		
4.	Are there any protrusions that extend beyond the play equipment surface? If so, is the protrusion's end diameter larger than that of its base?		X		The poles for the playground

Item	Issues	Yes	No	N/A	Comments
D.	Risk Management				
1.	Have the spin-arounds and see-saws been removed?	X			
2.	Are the decks lower than 66 inches high? Is the equipment height less than 104 inches?				Not all decks- it is a multilayered playset
3.	Are the grass areas free of holes and/or protruding sprinkler heads?	X			
4.	Are the walkways and ball courts free of trip hazards?		X		
5.	Are the trash cans/dumpsters “child-proofed”?	X			
6.	If present, are the soccer goals firmly anchored and in good condition?			X	
7.	If present, are the chain-link fencing mesh and any chain link backstop meshing serviceable and free of barbed edges?		X		
8.	Are the metal slides shaded? What is the slide compass orientation?			X	Plastic slides
9.	Have mery-go-rounds, pivot-type see-saws, concrete pipe, and glider-type swings been removed?	X			
10.	If present, are the basketball goals of the non-climbable gooseneck type?		X		
E.	Maintenance				
1.	Are the swings and bearing chains in good order?		X		Rusty
2.	Are “S” style hooks closed and swing seats intact?	X			
3.	Is the play equipment anchored according to specifications?				
4.	If present, are the wood structures sound, smooth, and free from splinters and excessive checks?			X	
5.	Are the trees properly pruned and healthy?	X			
6.	If present, are the benches sound, smooth, and free of any sharp corners?			X	
F.	Supervision				
1.	Is the play equipment centralized for easy supervision?		X		Very spread out
2.	Is there a separate play area provided for the ECE / pre-primary children?		X		
3.	Have the chain nets been removed from the basketball rims?	X			

Site Inventory

Elementary School: Sabin Elementary
Address: 3050 S. Vrain St
Inspector: Lauren Heesemann
Inspection Date: 2/9/04

Sabin Elementary

Approx number of children enrolled:

Pre-Primary and Kindergarten: _150_
Primary (1st-3rd Grades): _325_
Intermediate (4th-6th Grads): _200_
Total: _686_

Instructions for completing School Playground Site Inventory:

1. Number of Pieces of Equipment Present: For the third column of this inventory survey, please enter the total number of play apparatus found on site where **E=ECE**, **P=Primary**, and **I=Intermediate** intended users.
2. Number of pieces of equipment 10 years or older: For the fourth column of this inventory survey, please enter the total number of play apparatus on site which are older than 10 years. If there is no historical documentation and/or knowledge as to the actual age of the apparatus in question, assume that the item has been on site 10 or more years.
3. Factor Multipliers: For the fifth column of this inventory survey, please multiply the number of pieces of individual equipment by the number specified.
4. Number of Children Accomodated: For the sixth column of this inventory survey, please enter the toal number of children that the piece of equipment can accommodate.
   Note: Some play activities are rated assuming that a few children may have to wait for their turn. Also, on composite equipment (an apparatus composed of many activities) you need to rate the individual item for accommodating the number of children.
5. When specific equipment is not listed, please find the nearest generic type of equipment possible or list it on the blank space.
6. Game areas are utilized differently by each age group. I.E., a football field is rarely used by 1st graders but heavily used by 4th graders. The factor multipliers below are general guidelines only. Inpsectors should adjust these factors for observed usage patterns.

Item	Equipment Type	Number of Pieces of Equipment Present			Number of Pieces of Equipment Present			Factor Multipliers	Number of Children Accomodated		
		E	P	I	E	P	I		E	P	I
1.	Slides		3					2		6	
2.	Wide Slides							4			
3.	Swings					17		No.of seats		17	
4.	Climber			10				1per4ft. of edge			10
5.	Horizontal Ladder						1	2			3
6.	Horizontal Bars						6	2 for long, or # of pieces			8
7.	Fire Pole		5					2		25	
8.	See-Saw										
9.	Merry-Go-Round										
10.	Balance Beam										
11.	Spring Toy										
12.	Travel Rings						1	3			3
13.	Tether Ball						4	4			16
14.	Hop Scotch							3			
15.	Four Square						5	5			25

16.	Wall Ball						1	4			4
17.	Basketball						3	7			21
18.	Football										
19.	Soccer										
								Subtotals:	0	42	90
								Total Number of children accommodated by playground equipment:	132		
								Total the individual numbers in column 6 and compare this total number of children on the playground to determine if there are **at least 1.5 play opportunities** per child.	1,029		

Comments: This total does not include the recreational field area. There are playing fields set up (soccer, and backstops for baseball), however there were no soccer goals present when I was there, and the equipment is not readily available at all times. However, the area is available for unstructured play.