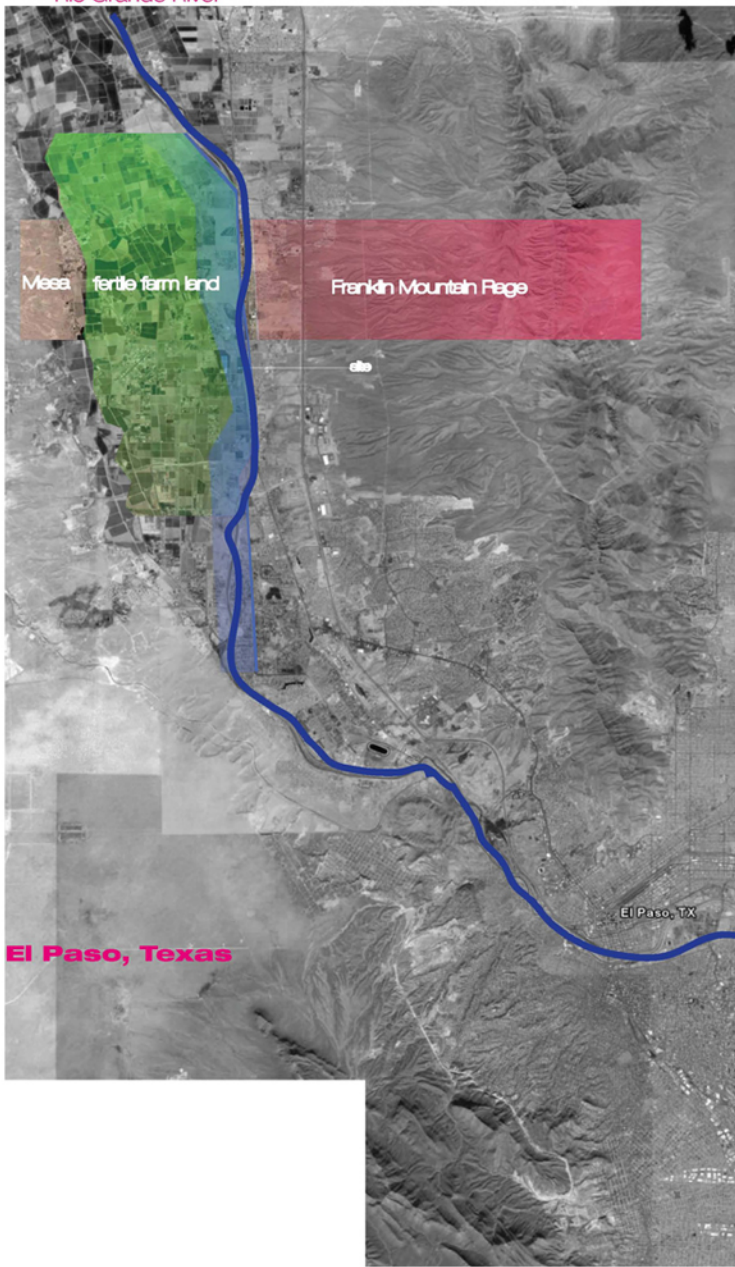


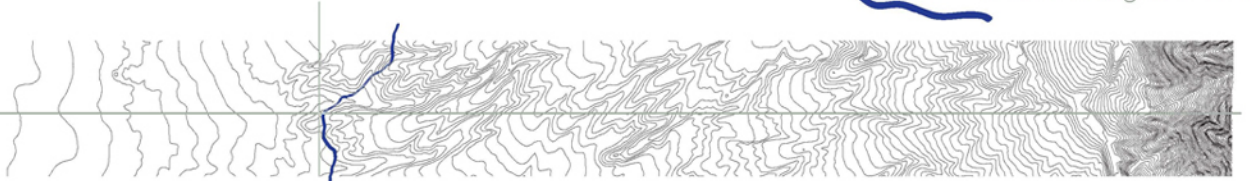
Rio Grande River



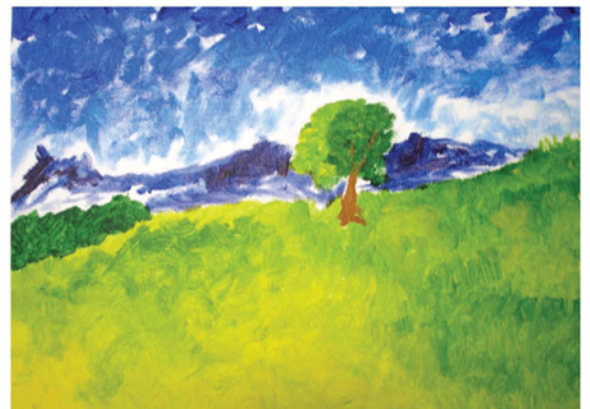
senior capstone  
college of architecture  
daniel v. arellano



visual catalogue of landscape



land section



reflections drawings



looking west onto site



looking back into the community and river

west El Paso



what if the landscape was the architecture?  
 what if a school as much as the children as it was about the landscape?  
 what if we made architecture so minimal that we notice the landscape and the materials of the landscape more than the architecture.

Sensorimotor period - Preoperational stage  
 stages that represents the child's understanding of reality  
 -Piaget

first age

|              | autogenetic                         | somatic   |
|--------------|-------------------------------------|---|
| 12-15months  | gestures or words to convey desires | stands up play begins                           |
| 15-18 months | Mimic parental activities           | walks able to grasp objects climbing on objects |
| 18-24months  | Wants to be independent at times    | faster physical activities, running jumping.    |
| 24-36months  | Shows preferences                   | advance motor skills are developed              |

first age

related to the elements of life earth light water light

related to teaching method

| related to teaching method | related to the elements of life | description  |
|----------------------------|---------------------------------|--|
| expression of self         | earth                           | close connection to the land. a place where children can touch the land and feel the soil.   |
| world map                  | earth                           | the child can begin to make their own logical map of the world by experience.<br><i>Piaget: the more a child sees new things, the more a child wants to see.</i> |
| care for self              | water<br>light                  | pure light - white light<br>rhythm of the day, seasons<br>feel the location of earth   |

Concrete operational stage

logic is developed- abstraction

second age

|          | autogenetic  | somatic |
|----------|--|---------|
| 6 years  | development of independence<br>complex forms<br>abstraction<br>recognition of geometry |         |
| 12 years | shows signs of wanting adult decisions   | puberty |

second age

related to the elements of life earth light water light

related to teaching method

| related to teaching method | related to the elements of life | description  |
|----------------------------|---------------------------------|--|
| expression of self         | earth                           | can the children express themselves by using the natural materials? This expression of oneself need to be manifested as the child feels stable.              |
| exploration                | earth<br>water<br>light         | how does light work?<br>what is water?<br>where do I live?   |
| independence               | earth                           | as the children grow the dependence on familiar places and the safety of the first stage does not exist any longer. The child is ready to explore the world. |

Formal operational stage

third age

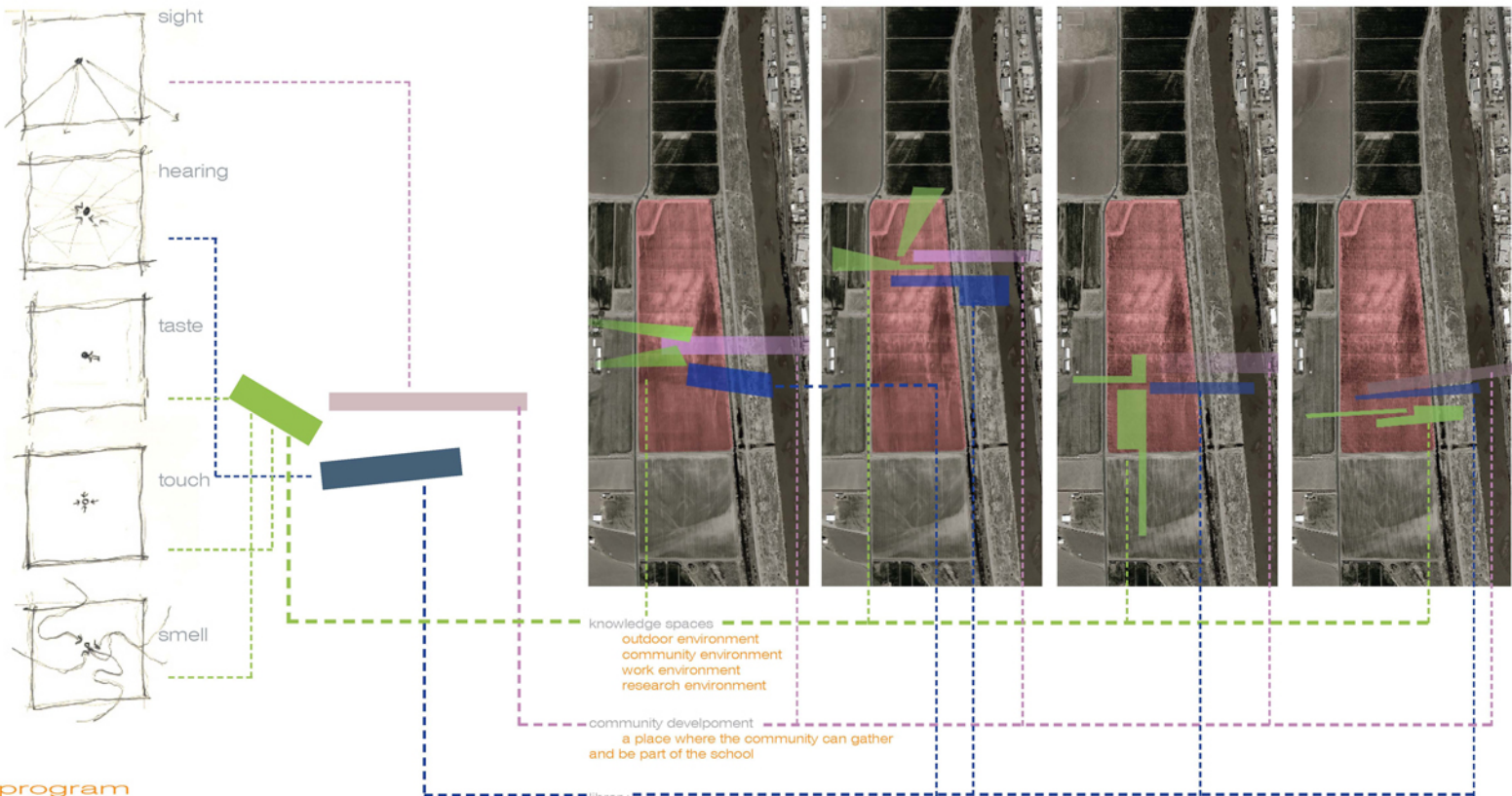
|          | autogenetic   | somatic                  |
|----------|---|--------------------------|
| 12 years | problem solving skills<br>classification<br>seriation | puberty<br>Height growth |
| 15 years | v   |                          |

third age

related to teaching method

| related to teaching method | description  |
|----------------------------|--|
| group work                 | adolescents are now given adult decision to make.<br> |
| social organization        | small groups and formation of social groups  |

development of program and relationship to sense



program

knowledge spaces

|          |        |
|----------|--------|
| k.....   | 1000sf |
| 1st..... | 1000sf |
| 2nd..... | 1000sf |
| 3rd..... | 1000sf |
| 4th..... | 1000sf |
| 5th..... | 1000sf |
| 6th..... | 1000sf |

exploratory spaces

|                      |        |
|----------------------|--------|
| library.....         | 2000sf |
| outdoor gardens..... | 7000sf |

service spaces

|                       |        |
|-----------------------|--------|
| administration.....   | 2500sf |
| food preparation..... | 1000sf |
| circulation.....      | 20%    |

community spaces

|                           |        |
|---------------------------|--------|
| community auditorium..... | 1000sf |
|---------------------------|--------|

total 24,600sf

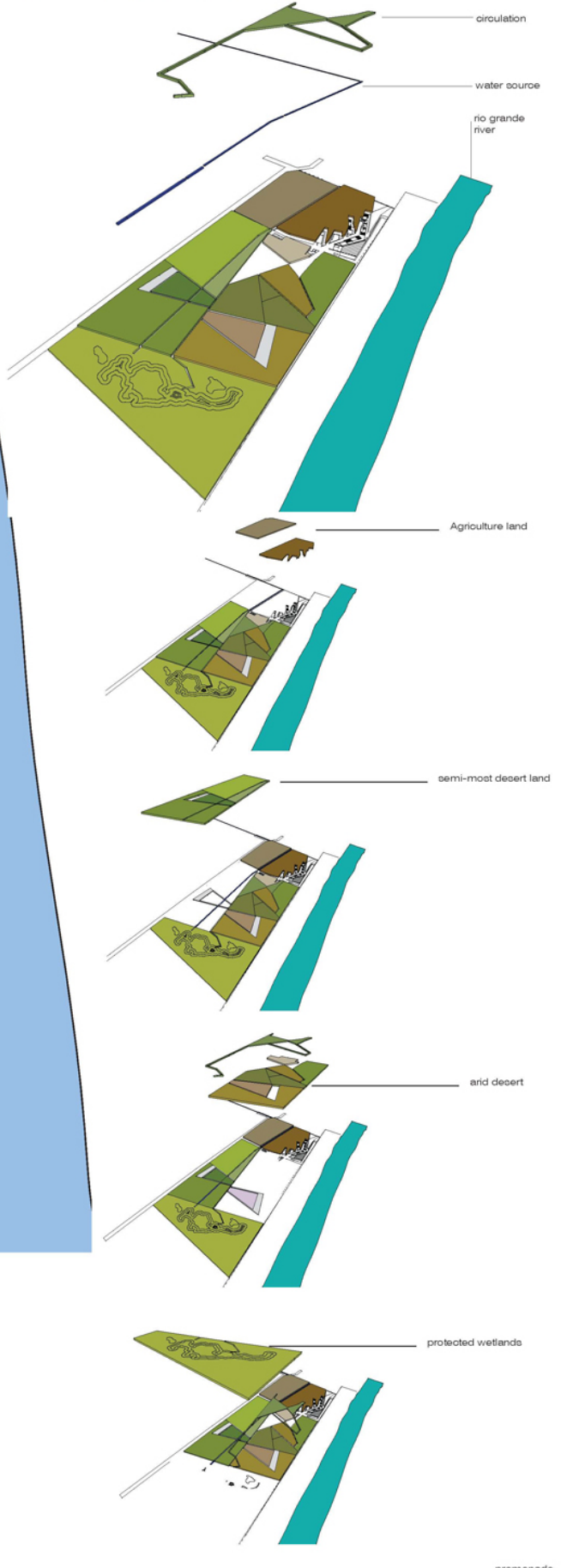


site plan  
scale 1:500



preserve plan  
scale 1:200

**Preserve program**



interpretive center

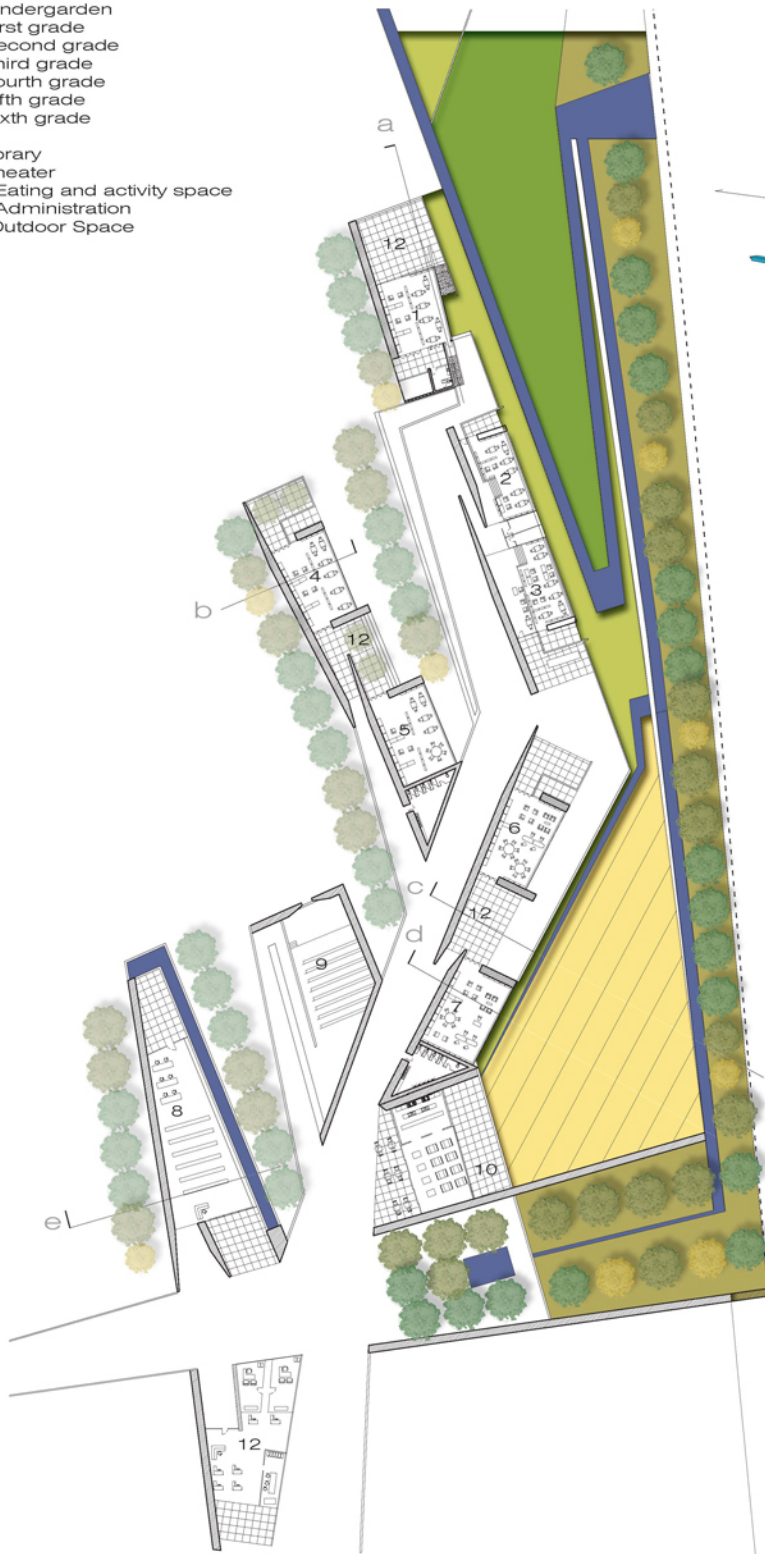


wetlands preserve

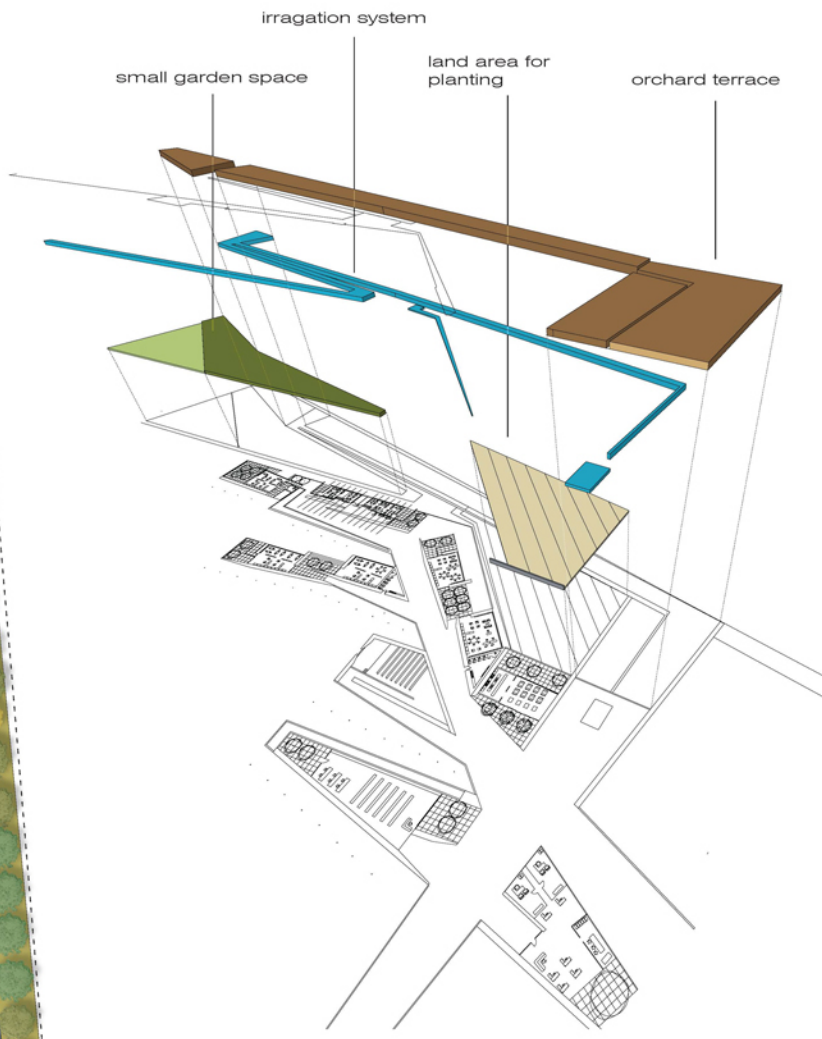


promenade

- 1. Kindergarden
- 2. First grade
- 3. Second grade
- 4. Third grade
- 5. Fourth grade
- 6. Fifth grade
- 7. Sixth grade
- 8 Library
- 9. Theater
- 10. Eating and activity space
- 11. Administration
- 12.Outdoor Space



plan  
scale 1/32" = 1'



flower garden



orchard terrace

enlarged plan  
scale 3/32" = 1'



outdoor space

activity space

reading space

work space

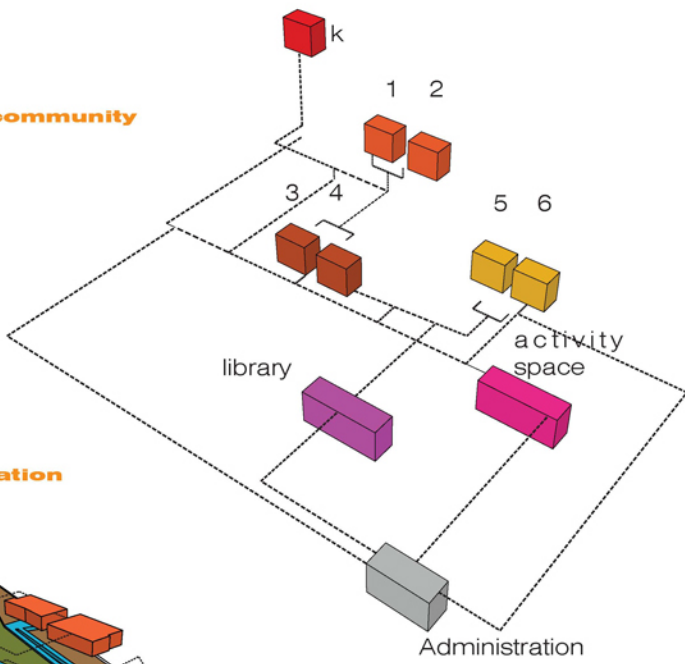
outdoor eating space

bathroom

small vegetable garden

herb garden

### classroom community



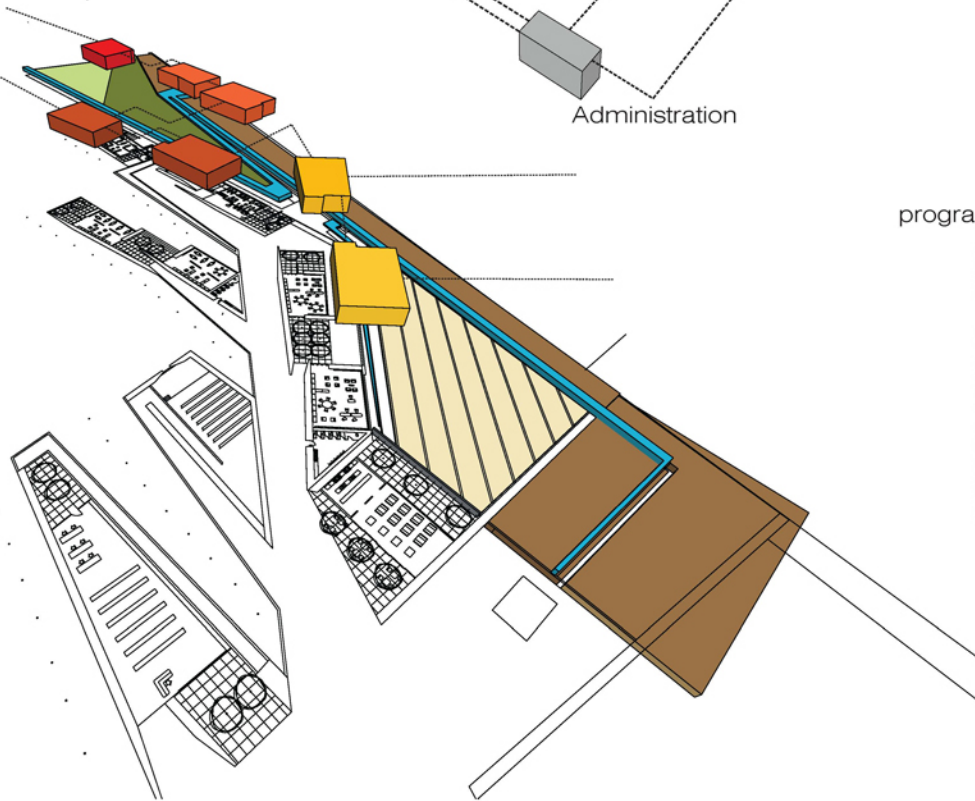
### program diagram

The program was developed from organizing the classrooms around how children will develop and grow, but also how they will experience the landscape.

The linear growth pattern of children is a primary model for deriving the schematic layout, but more importantly was how children grow from age to age, the children from the grade above them have a change to interact with the younger children, and form a community.

These two grade communities will share experiences and knowledge.

### age organization



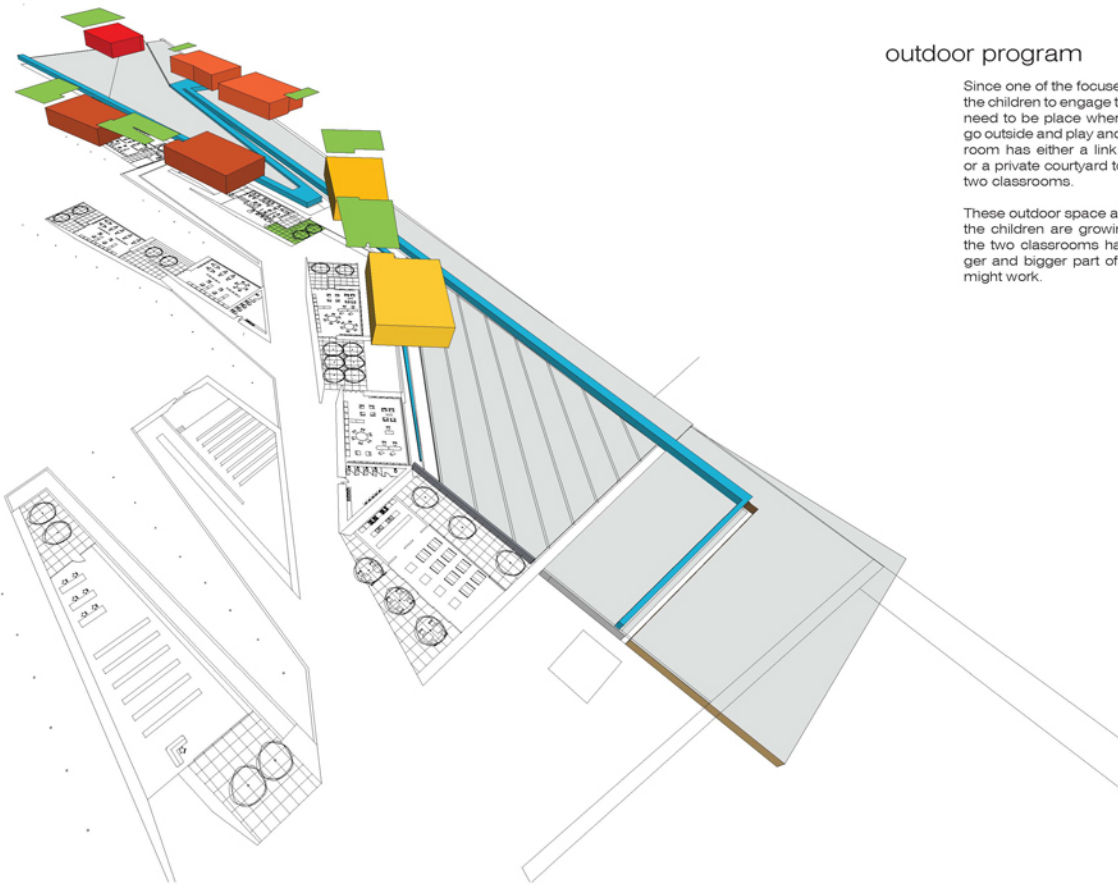
### program organization

As the children are moving from grade to grade they are given the opportunity to spend time in different areas of the landscape.

In the kindergarten of first stage the children are separate from the rest of the children so the influences that they will be exposed to are limited. This provides a place for the children to develop their own ideas and views of the landscape.

So the children go from being close to the terraces, which are a manifestation of this region, to being away from them to experience the farmland and the preserve. The final stage is set in a position where the children are looking back into the community.

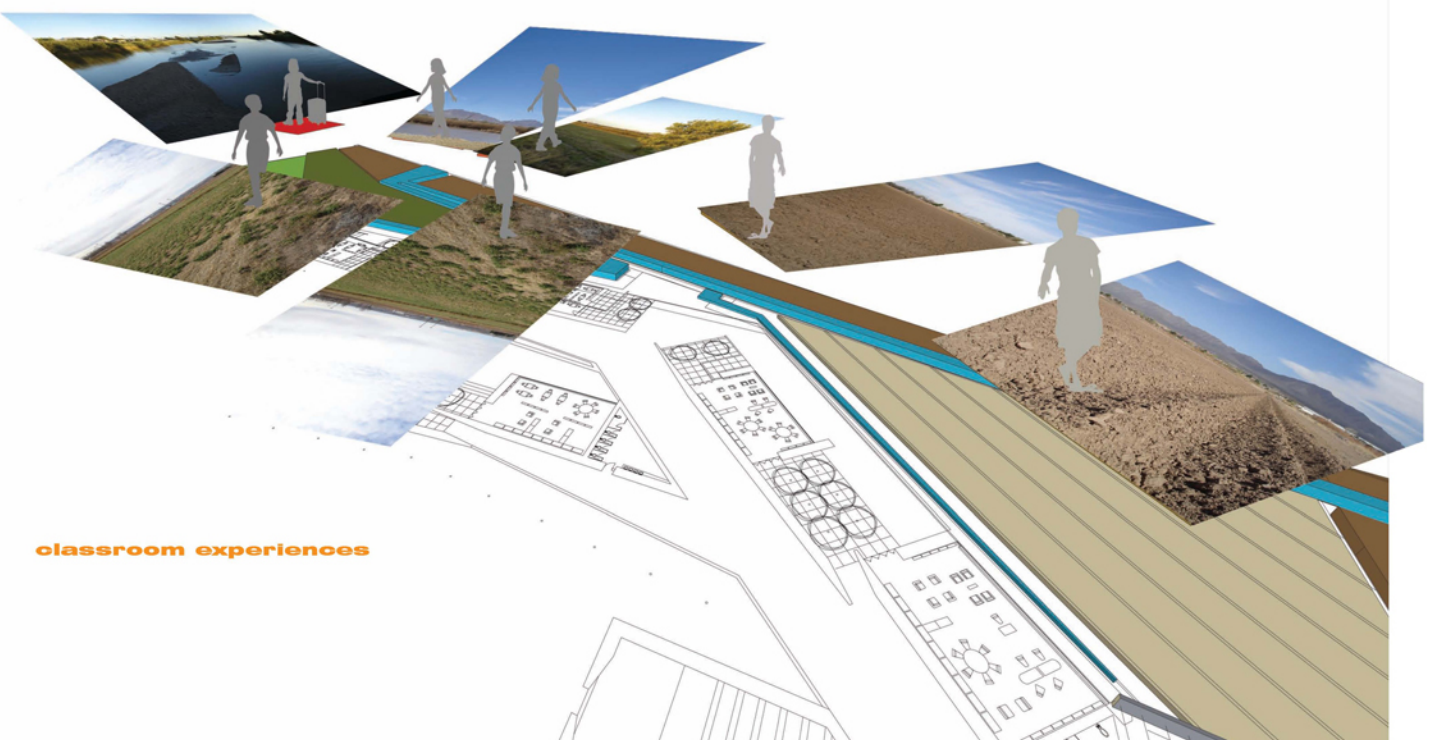
### outdoor space transformation



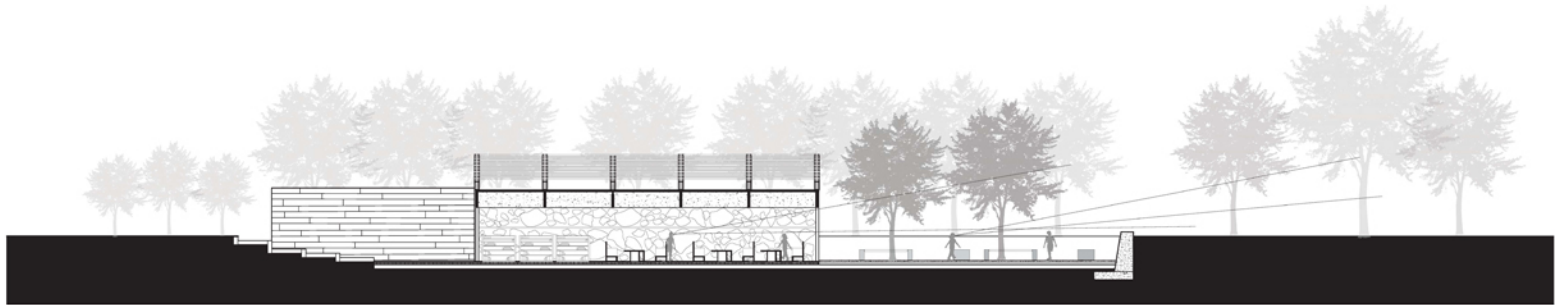
### outdoor program

Since one of the focuses of the school is for the children to engage the landscape, there need to be places where the children could go outside and play and explore. Each classroom has either a link to the land terrace, or a private courtyard to share between the two classrooms.

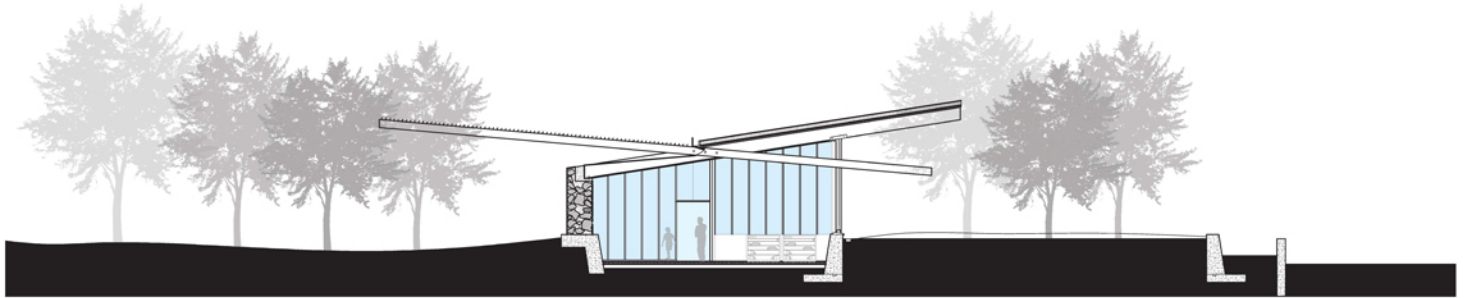
These outdoor spaces also change with how the children are growing. The spaces that the two classrooms have become a bigger and bigger part of how the classroom might work.



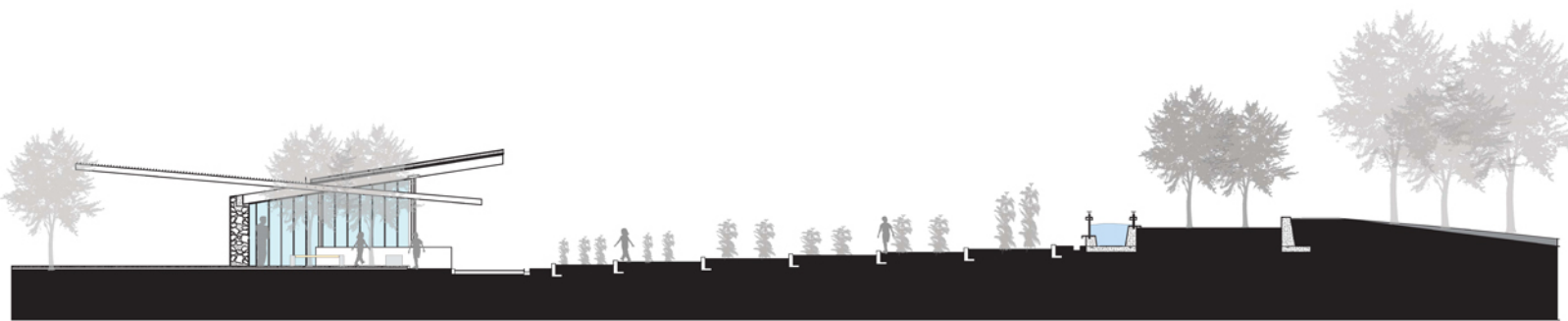
### classroom experiences



section a  
scale 1/16" = 1'

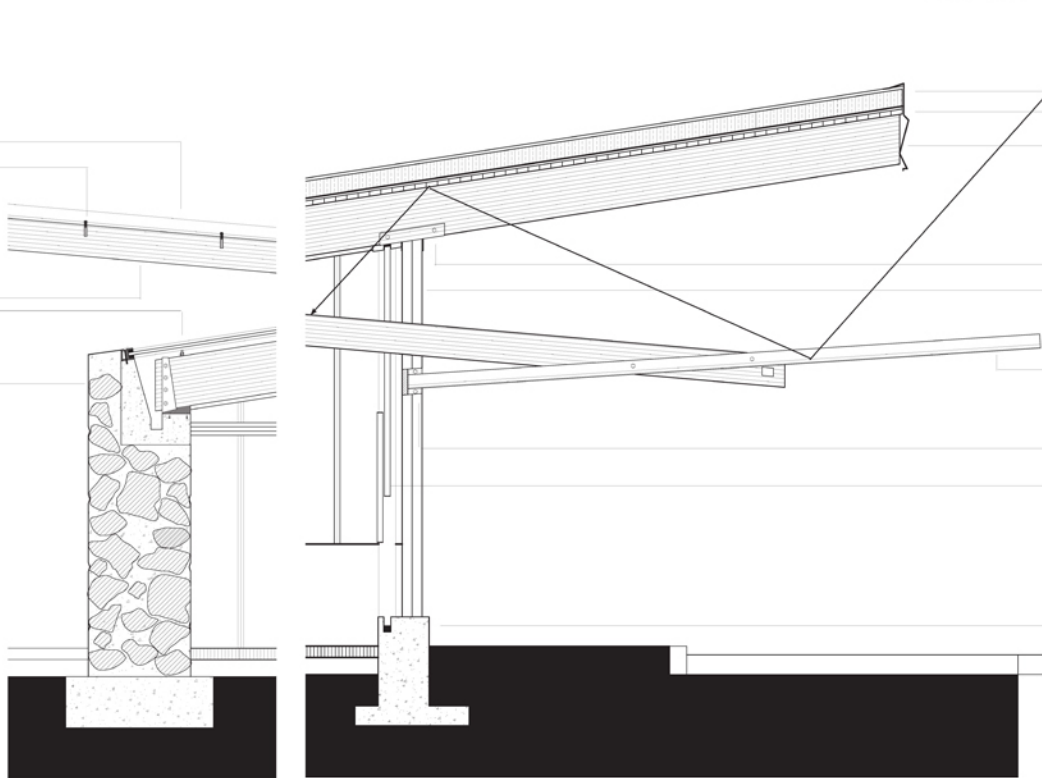


section b  
scale 1/16" = 1'

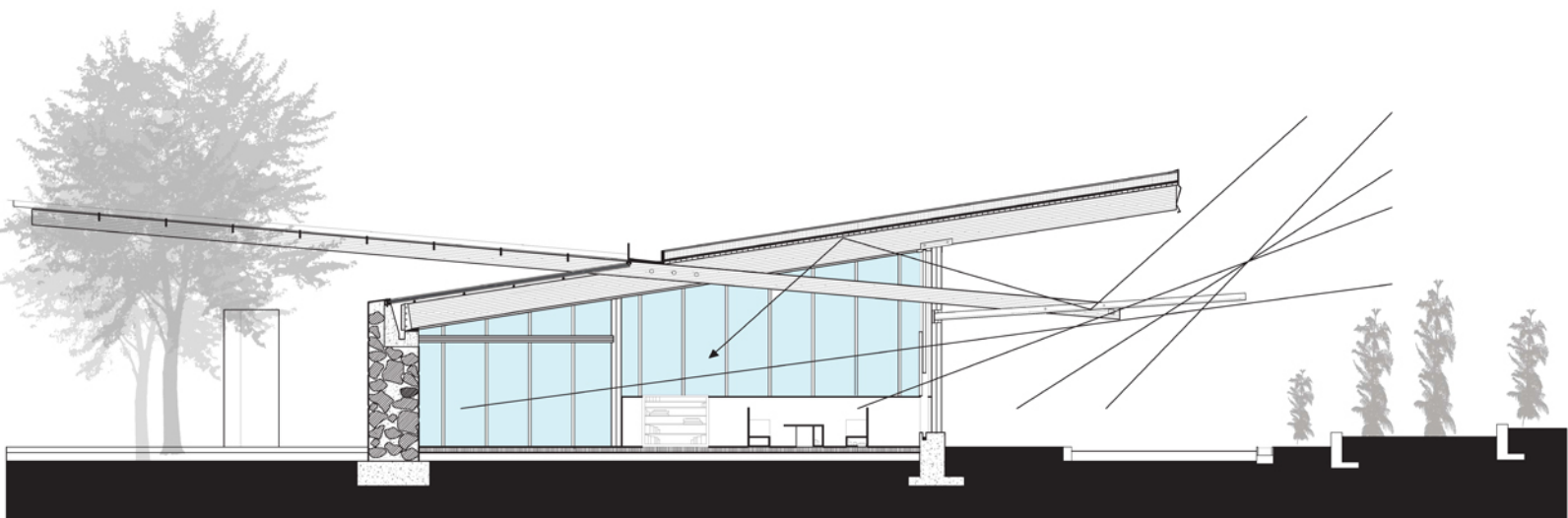


section c  
scale 1/16" = 1'

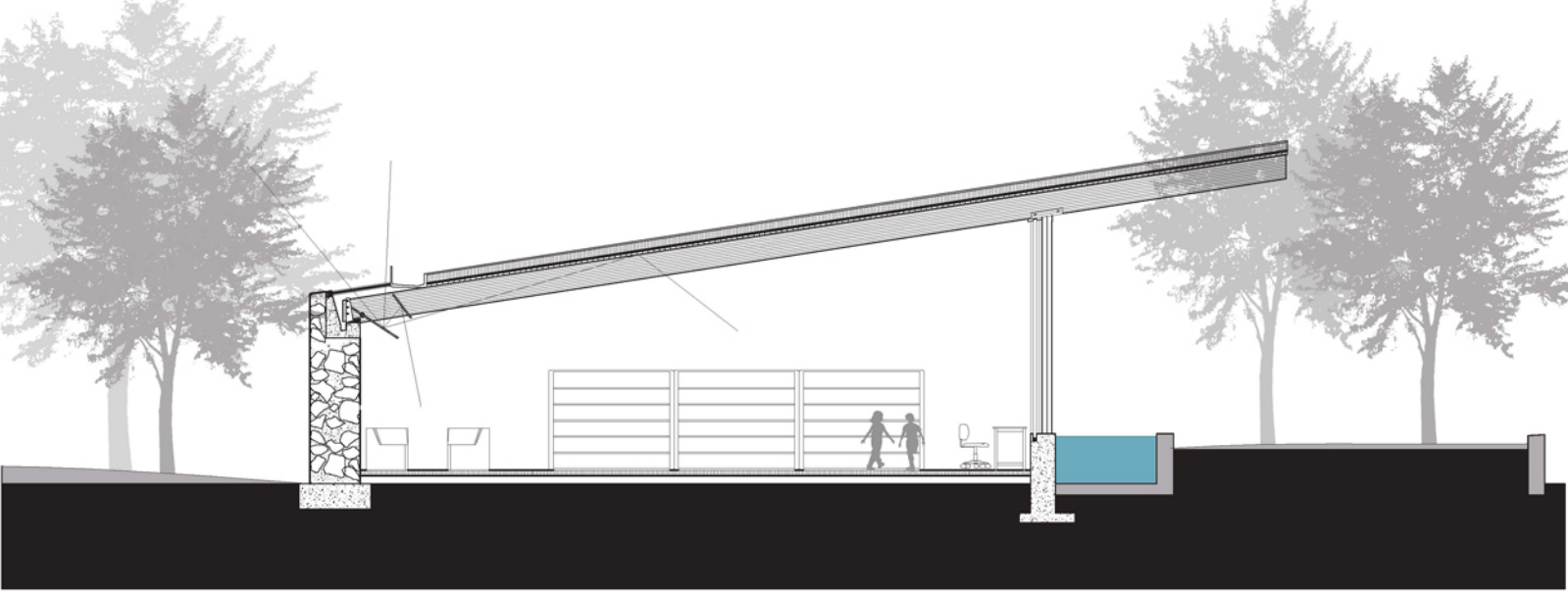
light gauge steel shading  
glass to wood connection  
glue-lam beam  
glass panel roof  
masonry wall



steel roof  
wood  
glue-lam beam  
steel saddle  
wood column  
wood frame  
light gauge steel  
steel detail  
ceramic frit glass  
concrete footing



section d  
scale 1/8" = 1'



section e  
scale 1/8" = 1'

**building components**

The building components were chosen to further explore the idea of having the landscape be the architecture.

There was an attempt to use natural materials from the local site and region. The masonry wall is constructed of stone from a local quarry, specifically this stone is used for called shot rock, which is a material that is used for aggregate.

The flooring is simply the soil from the site compacted to form a rammed earth flooring system, that provides thermal mass and texture for the classroom.

