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Project Name: Mosaic of learning experiences.

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Country: Venezuela / México

Mosaic of learning experiences.

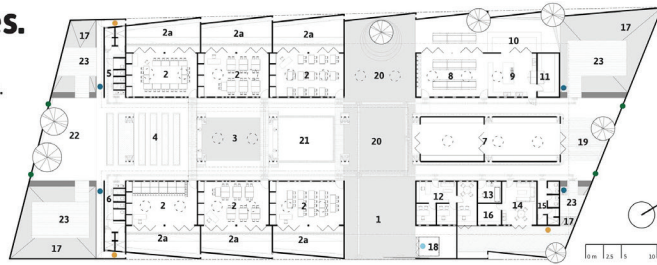
Xai-Xai, Chongoene, Mozambique.

THE SCHOOL AS A PLAYGROUND FOR LEARNING.

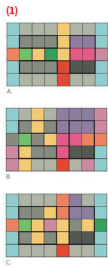
Where classrooms become courtyards and viceversa, as the etymological origin of the word aula (classroom) in latin. A school of versatile classrooms and courtyards.

The school building is constructed with 7 architectural components:

- (1) A mosaic of autonomous and versatile space-time units for learning;
- (2) Expandable classrooms for indoor learning;
- (3) Haptic surfaces for outdoor learning;
- (4) Territorial covers - not flat - but of double reference to: the traditional roofs of Mozambican rural architecture, and the complexity of the real world under which you learn;
- (5) A school backbone as an escalated condensation of public / collective spatiality.
- (6) Guide bands as a spatial representation in the school of territorial reality (rural, urban and countryside);
- (7) A wooden-structured leaning tower as a territorial milestone to be perceived visually and audibly (territorial timbre). Its inclination manifests the will of the school to go beyond the traditional verticality of learning.

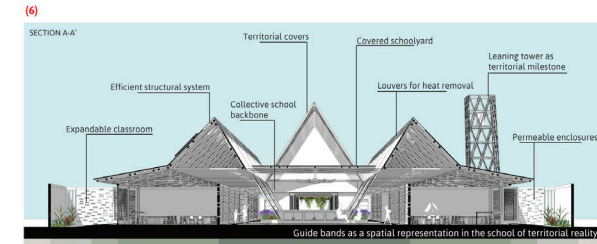


1. Entrance 2. Classroom 2a. Expandable classroom 3. Covered schoolyard 4. Crop area 5. Girls' bathrooms 6. Boys' bathrooms 7. Multipurpose room 8. Dining room 9. Closed kitchen 10. Open kitchen 11. Pantry 12. Administrative offices 13. Infirmary 14. Teachers' room 15. Adults' bathroom 16. Storage 17. Rainwater collectors 18. Leaning tower 19. Multipurpose terrace 20. Multipurpose area 21. Organic playground 22. Inorganic playground 23. Floating playgrounds. ● Septic tank ● Rainwater tank ● Water tank of 16 m³ ● Emergency exits



- offices / teachers' room
- Classroom
- Expandable classroom
- Multipurpose room
- Multipurpose terrace
- Multipurpose area
- Crop area
- School entrance
- Organic playground
- Inorganic playground
- Kitchens and dining
- Rainwater collector

The mosaic of autonomous and versatile space-time units for learning allows for a flexible school configuration.

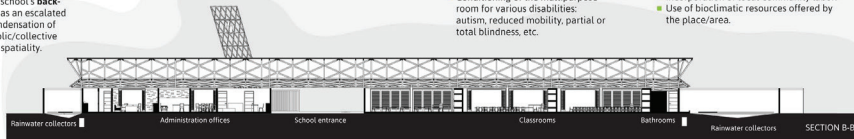


- Principles for an inclusive school**
- The school as an expanded inclusive reality: (a) inclusion of various children's disabilities; (b) the school as a scaled representation of territorial reality and the complexity of the real world; (c) the school not as an enclave, but present in its territory.
 - The school as a laboratory for rational and sensory learning (haptic). The interior (classroom) and the exterior (patio) as places for learning.

- Resources for Accessibility**
- Ramps / sloping floors between the classroom and its garden expansion.
 - Band for the blind sidewalk throughout the school.
 - Signals in Braille system throughout the school.
 - Conditioning of the multipurpose room for various disabilities: autism, reduced mobility, partial or total blindness, etc.

- Resources for Sustainability**
- Rainwater catch areas located in the four corners of the school lot.
 - Photovoltaic cells.
 - Structural system in certified native wood.
 - Optimization of the structural solution with a maximum deformation of 1%.
 - Incorporation of local-community labor.
 - Use of bioclimatic resources offered by the place/area.

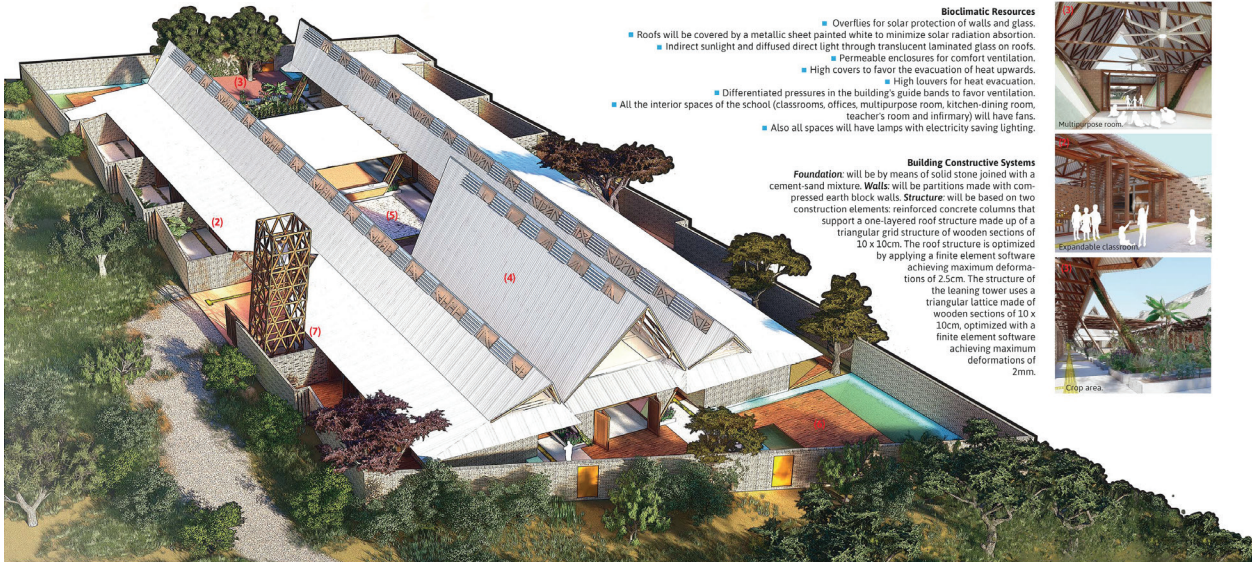
The school's backbone as an escalated condensation of public/collective spatiality.



- Bioclimatic Resources**
- Overlays for solar protection of walls and glass.
 - Roofs will be covered by a metallic sheet painted white to minimize solar radiation absorption.
 - Indirect sunlight and diffused direct light through translucent laminated glass on roofs.
 - Permeable enclosures for comfort ventilation.
 - High covers to favor the evacuation of heat upwards.
 - High louvers for heat evacuation.
 - Differentiated pressures in the building's guide bands to favor ventilation.
 - All the interior spaces of the school (classrooms, offices, multipurpose room, kitchen-dining room, teacher's room and infirmary) will have fans.
 - Also all spaces will have lamps with electricity saving lighting.

- Building Constructive Systems**
- Foundation will be by means of solid stone joined with a cement-sand mixture. Walls will be partitions made with compressed earth block walls. Structure will be based on two construction elements: reinforced concrete columns that support a one-layered roof structure made up of a triangular grid structure of wooden sections of 10 x 10cm. The roof structure is optimized by applying a finite element software achieving maximum deformations of 2.5cm. The structure of the leaning tower uses a triangular lattice made of wooden sections of 10 x 10cm, optimized with a finite element software achieving maximum deformations of 2mm.

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