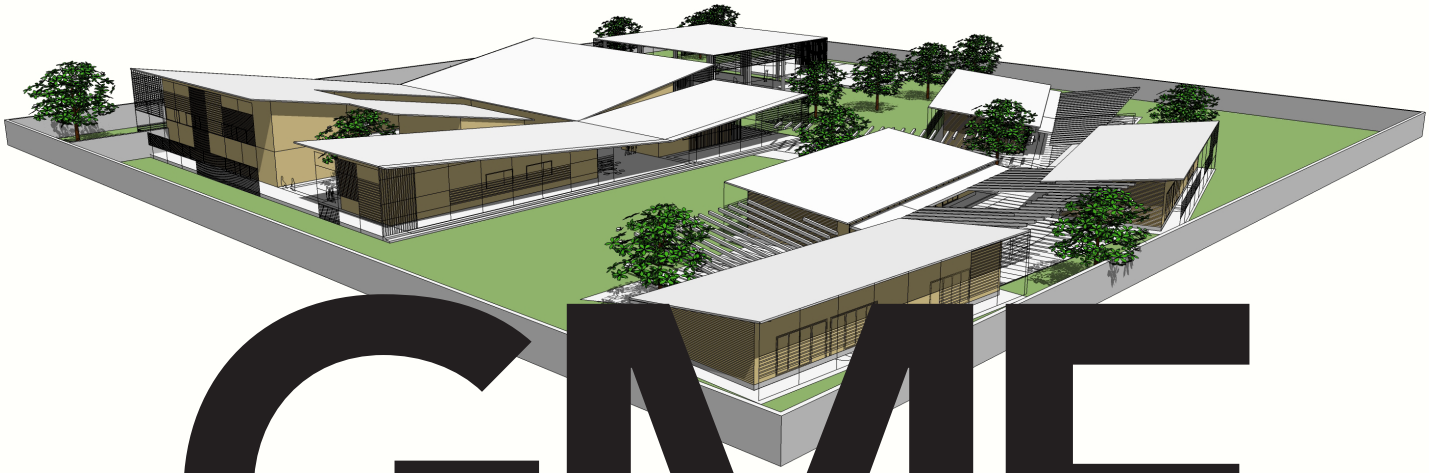

GMF

GEORGES MALAIKA FOUNDATION SCHOOL IN LUBUMBASHI . DRC

ABOUT

studio**MDA** was founded by Markus Dochantschi in New York City in 2002 with the mission of challenging the boundaries of design in architecture. With more than fifteen architects, designers and staff members, studioMDA brings many years of design experience to the table. The team includes members with a wide range of backgrounds as well as qualifications such as LEED AP certification, Masters Degrees from top academic institutions and Ivy League teaching experience. For each new project, studioMDA assembles a team that is specific to the projects' needs. studioMDA works closely with a wide range of consultants and professionals bringing a multidisciplinary approach to its designs.

Since 2002 studioMDA 's project and competition sites include New York, New Jersey, Massachusetts, Ohio, Vermont, Alaska, Florida, Sweden, Austria, Switzerland, Norway, Ireland, Peru, Chile, Germany, Congo and Malawi. studioMDA and its principal Markus Dochantschi have established themselves as the next generation of architects. After winning international competitions and with a track record of delivering projects, studioMDA is setting a new vision for architecture with a deep dedication to building a sustainable environment.

The First Prize for one of Germanys most prestigious Universities, as well as the First Prize for the Residential Tower and state of the Arts Performance Center, commissioned by the City of New York, document the spirit in which studioMDA approaches architecture. Our international experience allows us to see beyond the given boundaries, and lead architecture towards a more sustainable future. Unlike other firms, we strongly believe that good design can promote "passive" sustainability, while a rigorous cost controlling can deliver a sound building, without compromising on quality. studioMDA has done work from Alaska to Africa with local Architects of Record.

Markus Dochantschi

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Our philosophy could not be more aligned, as we strongly encourage and promote a close collaboration with the local firms we work with. With all our projects, we not only work closely with the local firm, but we collaborate from day one. For each project we placed the key project team members of studioMDA inside the local based firm, starting at execution of Construction Drawings. This will allow a smooth transition. One staff member stays until the completion of the project. In order to establish a synergy between the program, construction budget and operation budget, we suggest a sequence of subject specific workshops, followed by project presentations.

The detailed exchanges between design architect, architect of record and staff, as well as construction manager, allows us to fine-tune the building to the spacific institutions needs. studioMDA has successfully developed a programming matrix. Together with a rigorous Value Designing Method, we can guarantee a maximum cost for each project. Unlike the typical Value Engineering process, we believe Value Designing avoids cost overruns without a compromise in construction quality. studioMDA is working hand in hand with the selected consultant team, starting from day one. For each project we suggest only working with local consultants, ensuring a more efficient interface between architect and engineer. While working with a local construction manager, studioMDA will have an in-house cost estimator and project manager assigned to this project.

studioMDA 's approach is to creatively engage all parties at the very beginning, forming an inspirational collaboration in defining architecture. Calling on a wide range of consultants beyond the architect's typical collaboration, studioMDA has brought experts leading in their field early on in the project. Within this context, the developed architectural language can become layered into micro and macro scales. The Design will be a driven by its programmatic needs, with an emphasis on creating communication stimulating spaces, while adhering to a hyper functional educational environment. The buildings performance will be based and designed on principals of "Passive" sustainability. We strongly believe to align the respective stakeholder's interest, while adhering to the given budget. We are currently designing a University building for 3 different faculties; one shared large audition for the campus, and a large dining hall. Commissioned by the State, the management of our stakeholders requires us to see beyond our role as architects. studioMDA moved staff members to Germany for 3 months, allowing us to develop the brief beyond the given information, and closely work with and for all stakeholders. The result was an expedited Schematic Design Phase, as well as design aligned with all stakeholders.

Over the course of the past years we have developed a dynamic quality control and design methodology. Each project has a dedicated Senior Project Architect, committed to the project from the first day, until the completion. We strongly believe in staff members seeing a project through and taking "ownership" of the project. The office has weekly project meetings and the Principal of the office will partake from the overall design concept, detailing, to selecting finishes. In order to ensure the execution of complex designs, the office is working with physical models, computer models, and BIM (Building Information Management). Unlike the usual stages suggested by the AIA, we strongly believe in intermediate presentations during each phase to allow the client to finetune the balance between design, program and budget. Each sub-phase presentation, as well as the milestone presentation will be document, both electronically and as a booklet. Unlike most architectural firms, studioMDA has an in-house estimator and project manager. studioMDA has also successfully worked with IPD (Integrated Project Delivery), allowing to find a balance between design, quality and cost.The quality/cost/design control methodology allowed studioMDA to take on the role as a Project Manager/Architect for a $40 million project in Germany, guaranteeing a fixed opening date, as well as a set Project Budget.

Georges Malaika Foundation School
Kalebuka Village, Lubumbashi DRC

MEET 104 GIRLS WHO CAN CHANGE THE WORLD

Building a School on a Model of Community Empowerment.

The GMF School for Girls opened in late August 2011, with a starting class of 104 girls. The school is located in Kalebuka, which has an estimated population of 25,000 and is one of eight districts that surround Lubumbashi, the premier city in the south-eastern Katanga Province of the Democratic Republic of Congo. Currently, Kalebuka has only five small schools and three vocational training programs. The GMF School for Girls is located in the Munama quarter of Kalebuka, a completely underserved area which has no schools or educational facilities.

www.gmfafrica.org

As a result of the ongoing conflict in Congo over 5.5 million deaths have occurred, and over 400,000 women have been raped over the last decade. The dire situation in Congo has wreaked havoc on the educational system, leaving many children out of school, of which over half are girls. GMF has committed to addressing the growing need for new schools and reversing the education crisis Congo is currently expe-riencing. Despite the challenges that Congo faces, hope is on the horizon.

GMF

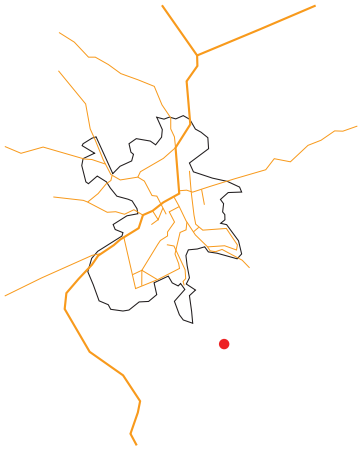
GMF has worked with studioMDA of New York City to design a school that meets the educational needs of its students, as well as offers a sustainable and high performance design model for new schools in the region.

The plan of the school is a simple courtyard building with a number of outlying classrooms connected by covered walkways. The courtyard will serve as the hub of the school, around which adjacent programs will be organized under shaded outdoor spaces in relation to varying degrees of air movement. The "Hub" will also function as a community center during the weekends: people can use the stage and outdoor pavilion for larger community gatherings and the dining hall for smaller community meetings.

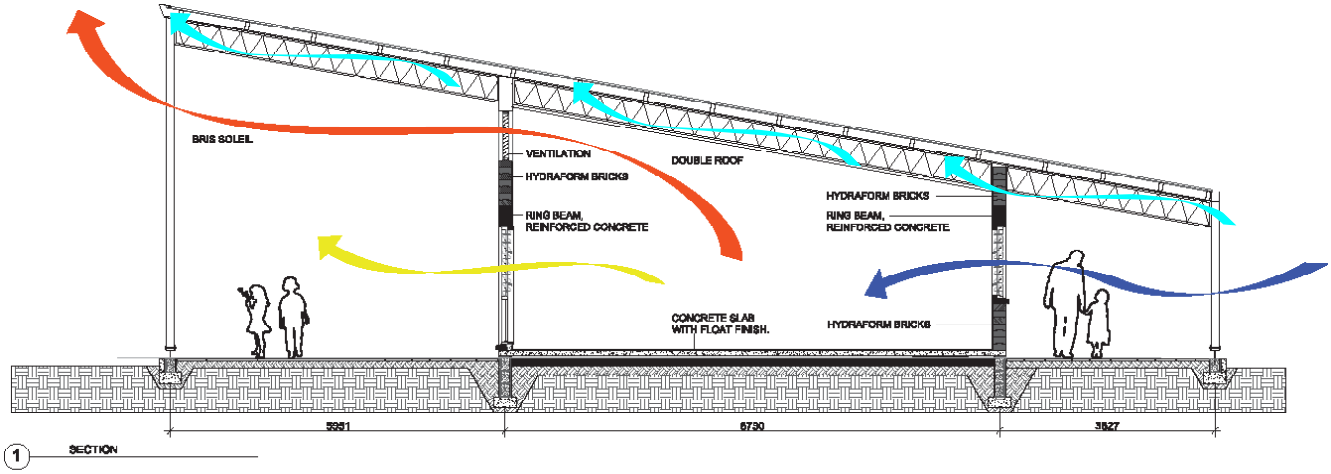
The dining hall is adjacent to a spacious porch, offering flexible seating capacity. The classrooms, in clusters of three, will be built in phases as the school grows. Each cluster is free standing, turned at a slight angle to maximize light and air. Each classroom has a covered outdoor space on one side and a view to the landscape on the other. On the west side of the school there will be a garden plot for school lunches; the rest of the site will be cultivated as natural landscape.

Africa

Democratic Republic of the Congo



Lubumbashi

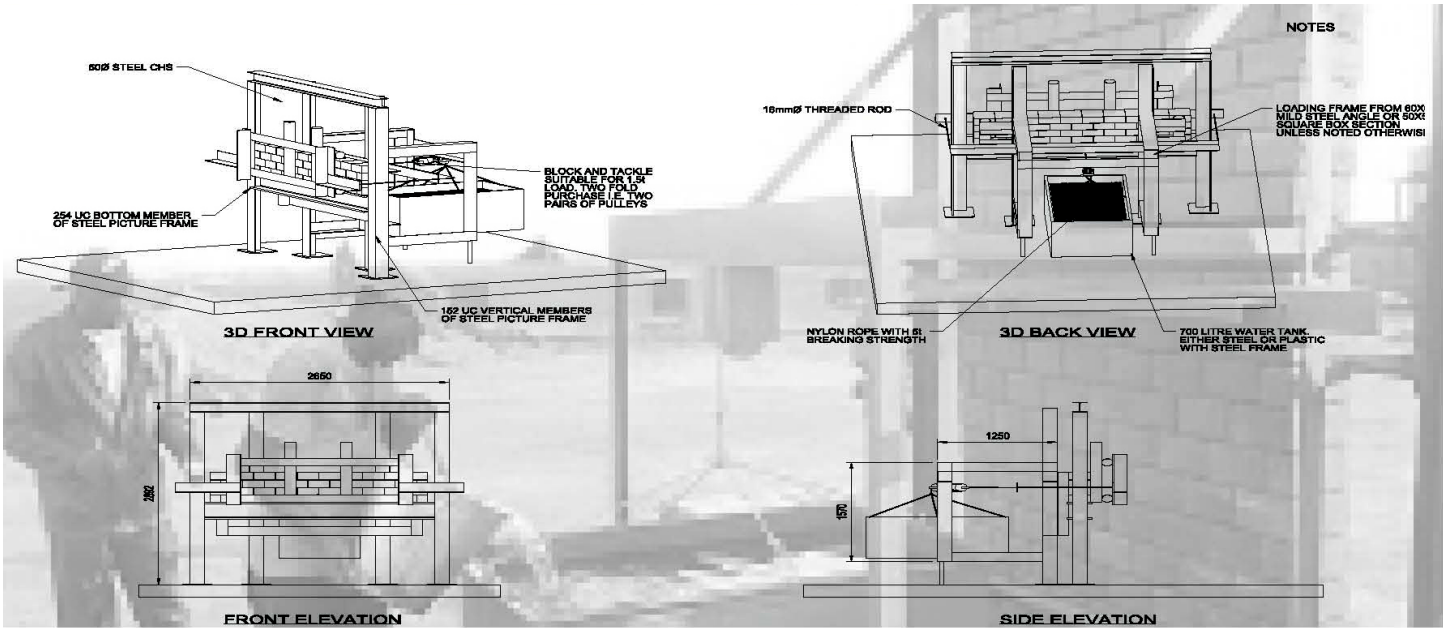


Passive Ventilation Diagram

The school's design utilizes environmental analysis with appropriate technologies to achieve a range of sustainability goals such as passive ventilation and natural light. Double roofs catch the breeze, inducing natural ventilation. Large overhangs on the roofs create ample shading, preventing direct light from striking the glazing and consequently heating up the building interior. Photovoltaic panels in the next phase of construction will contribute to the school's energy independence. A rainwater catchment system will collect water for small gardens and other learning landscapes throughout the site. Most construction materials were sourced locally, including compressed soil bricks, made from soil on site, avoiding the use of burned bricks which have been largely responsible for widespread deforestation in the region. The Kalebuka community was involved in various aspects of construction, such as taking part in brickmaking, landscaping and the technical expertise of local contractors, which played a leading role. The inclusion of the community of impact is based on the idea that most of the answers to the challenges facing Africa reside with Africans, and women and girls play a critical part in that development. Through educating girls and thus empowering women, they are better equipped to finding solutions and creating a better future.

Project Team:

Chris Maurer / Jacob Sivander / Christina Akiskalos / Chad Kellogg



MATERIALS

The ethos of design for the campus is to use locally available and locally produced materials. The GMF school is being build with Hydraform bricks, made from soil on site. This is to avoid the use of burned bricks which have been largely responsible for wide spread defrostaion in Congo. The masonary infill of the building envelope has been constructed of compressed earth block, the material of which has be taken directly from site.