RiSE: participatory design in East Jerusalem

Data on education in East Jerusalem

88.000

Registered students

20.000

Non-registered children

East Jerusalem
= occupied territory

Israel
= main duty bearer

Chronic shortage of classrooms and substandard school infrastructure

- Small size of classrooms

Access restrictions and protection issues for teachers and students

- Delays, harassment or revocation of permits.
- 20% of students and teachers have difficulties in reaching schools
- 178 students from East Jerusalem were imprisoned
- 51 were put under house arrest
- 1 student was killed by Israeli Security Forces (ISF)
- 2 students were wounded by ISF
- 88.2% of students are exposed to violence within schools

High drop-out and underachievement of students

- 36% of children do not complete all 12 years of school
- Low quality education is a function of the lack of qualified teachers

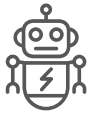
Lessons learned from the E-Learning Project

- **288 schools defined their ICT needs** & were provided with ICT material
- Teachers were supported in the development of Learning Objects Using ICT, a total of **1,600 learning objects** were developed.

- Over **14,000 teachers were trained** on student-centered learning through the use of ICT.
- Development of **training material**.

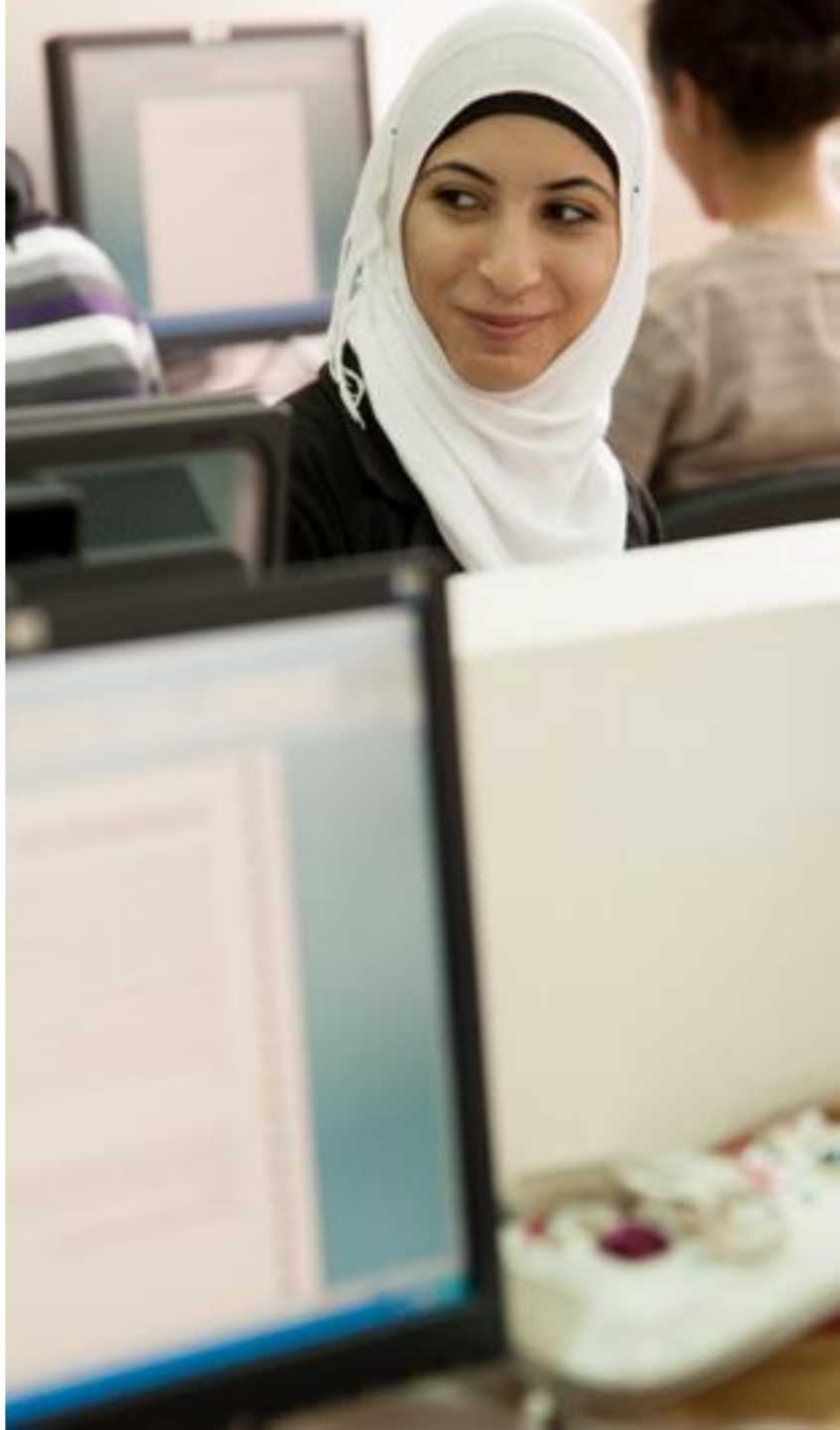
- Development of a **digital training portal** to share knowledge & experiences.
- More than **6,500 active users** at the beginning of 2016.

- **Mobile Learning Training** organized in 53 Palestinian schools.
- 500 students **developed mobile applications**.



- Training & equipment for **the use of robotics** for STEM education.

- **Policy advice** was provided to learn from the activities & pilots.
- **6 policy papers** were published the fuel the Palestinian policy on digitation in education.



RiSE project: EU (3,8MIO) + Belgium

Output 1

The infrastructure of schools in East Jerusalem is improved and provides an inclusive, safe, healthy and environmentally friendly environment

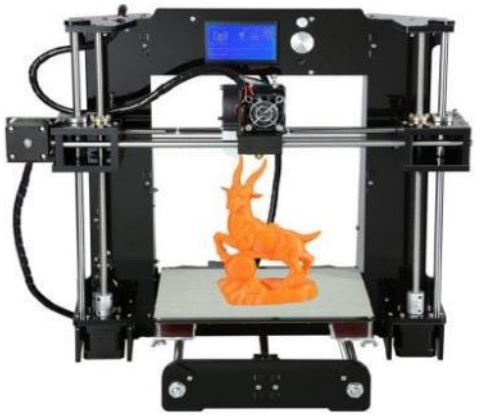
Output 2

Students have gained life skills and have an increased sense of ownership of the school by being actively involved in the rehabilitation process

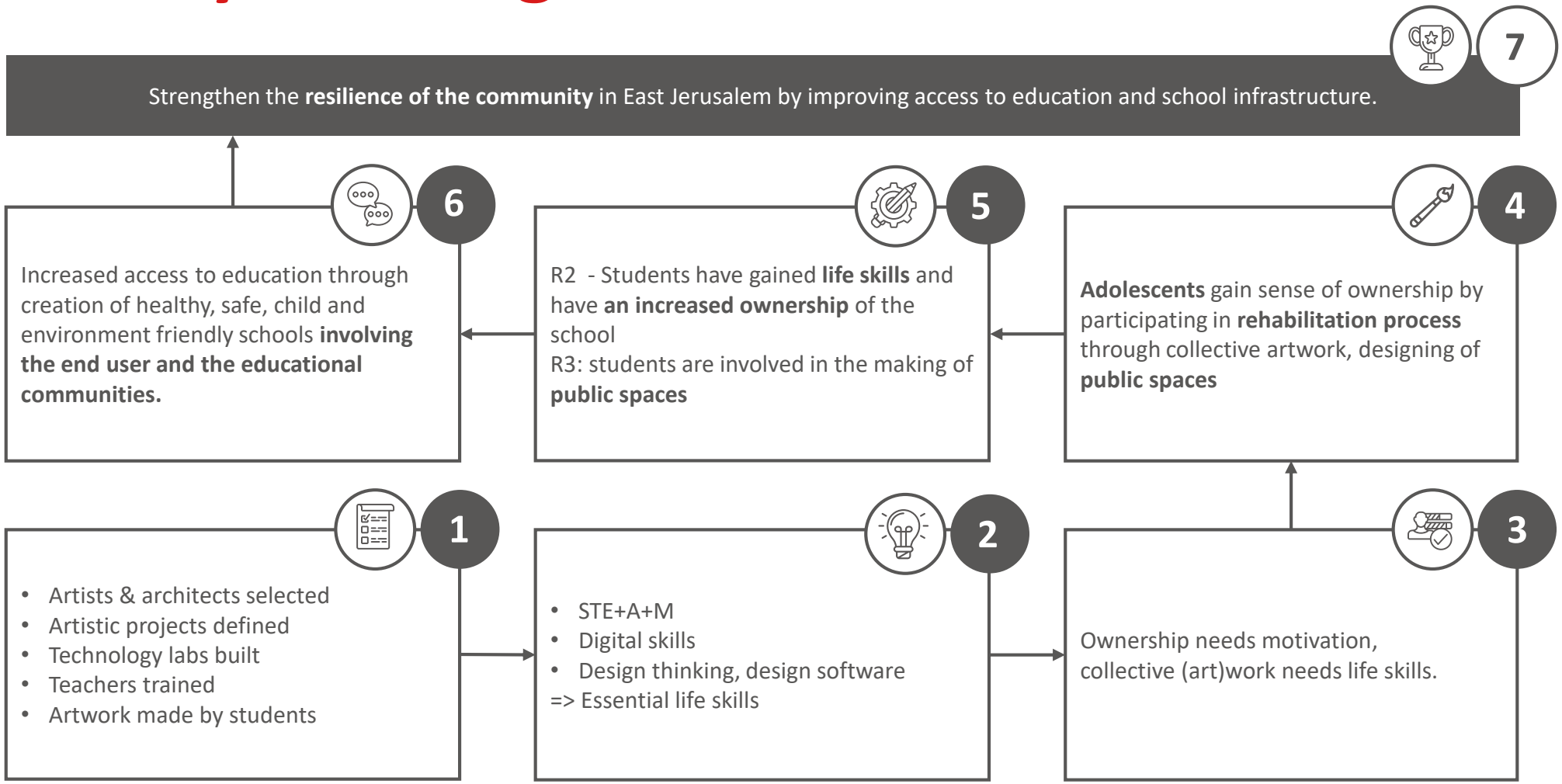
- STEAM activities, digital skills
- Fab-labs/technology labs
- Design thinking using design software
- Collective artwork

Output 3

The community is actively involved in the creation of 5 **semi-public external spaces** in or around the upgraded schools rehabilitation process



Theory of change



The transition from STEM to STEAM

STEM > STEAM

Science, technology, engineering, and math (STEM) subjects are the focal point of both educational approaches.

The “A” in “arts” turns STEM into STEAM.

(-) STEM

The critical process of creativity and innovation is still missing.

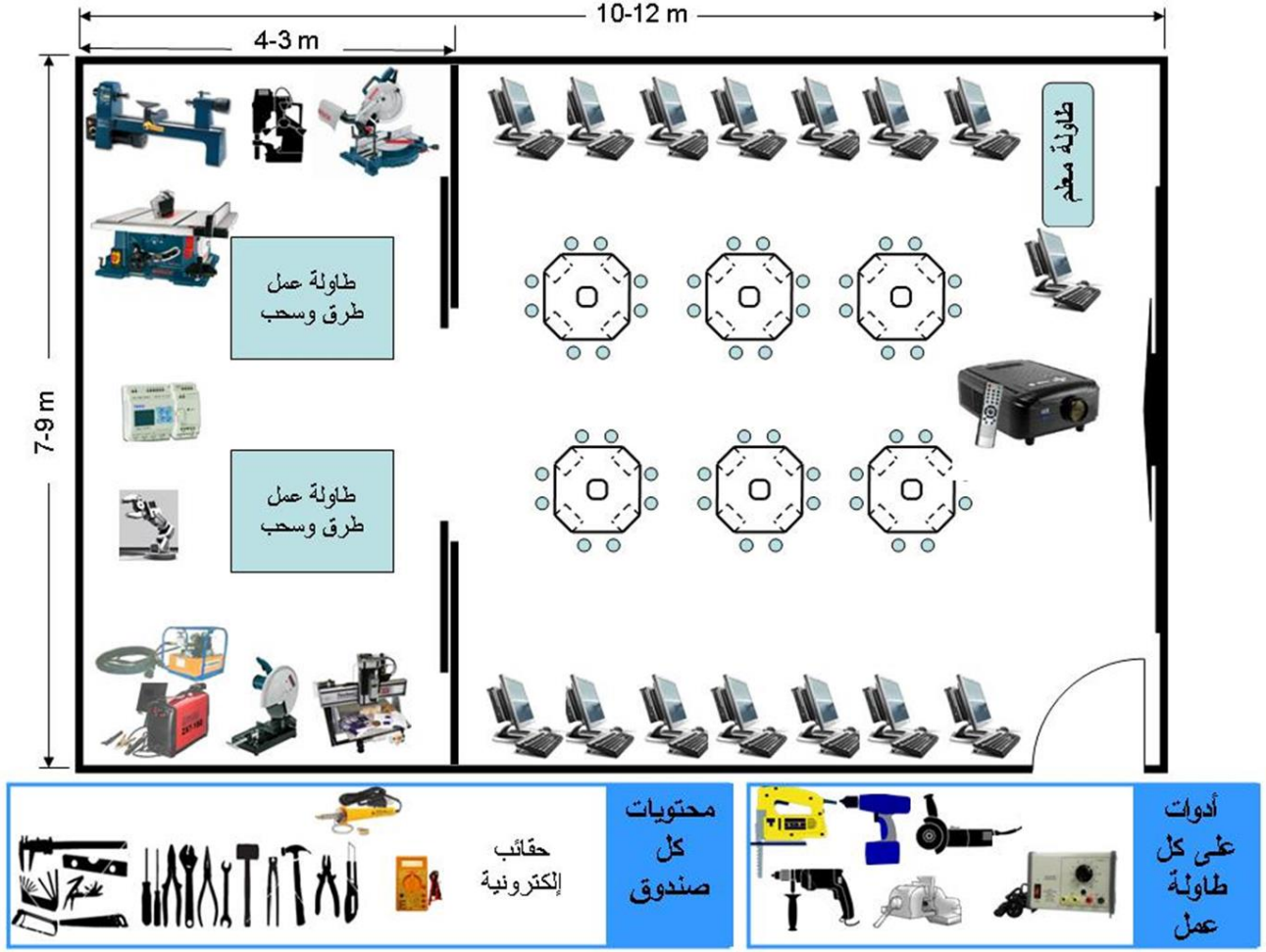
Economies require more than an understanding of the four areas of study (science, technology, engineering & math), it requires application, creation and ingenuity as well. That’s why STEM needs an art component.

For EJ: art to be connected to IDENTITY

(+) STEAM

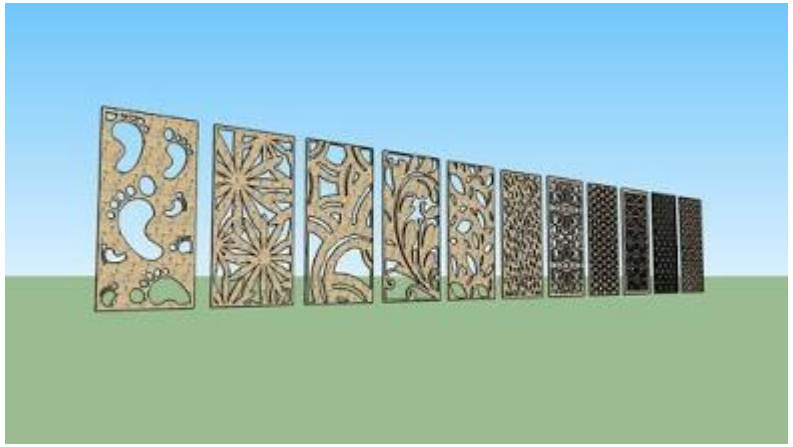
STEAM activities can help **increase motivation** as well, helping to fight early drop out while living in highly stressful conditions.

Redesigning the technology labs



Using software to design spaces

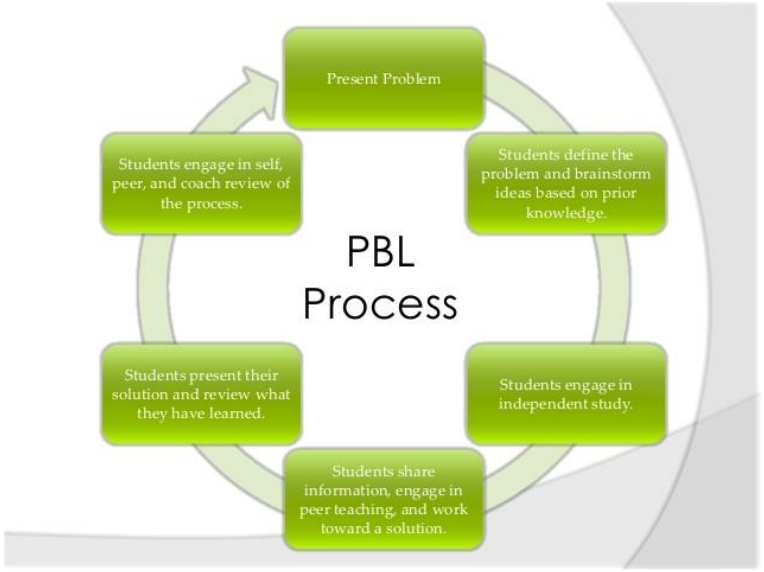
SKETCHUP: very user friendly, sketchup for Education, intuitive design, connection to 3-D printing, CNC wood cutting…



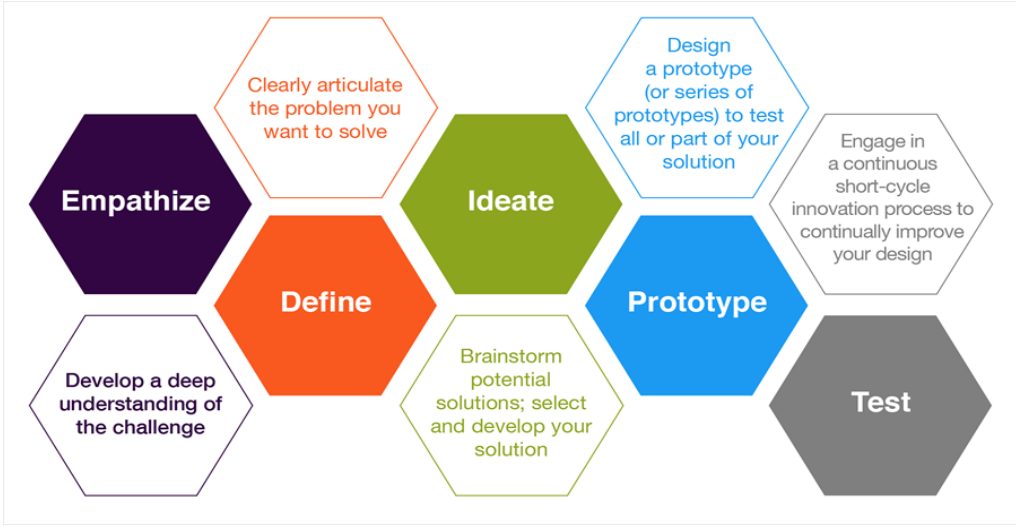
MINECRAFT: Belgian experience in Gaza, interesting tool for public spaces, collaborative work possible

Pedagogical methods

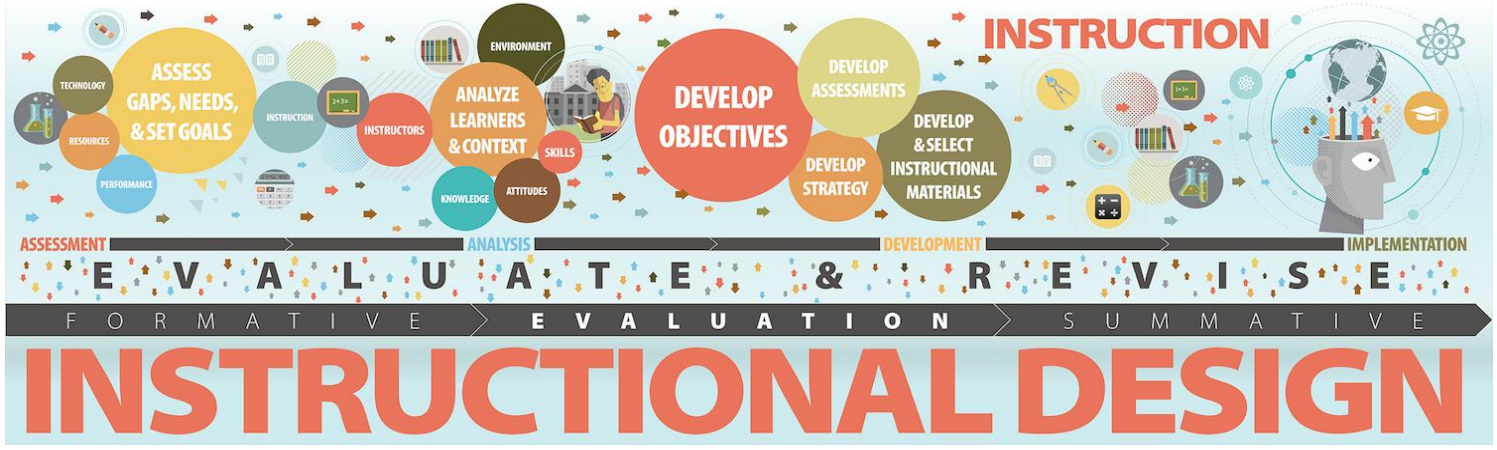
1 Problem based learning



2 Design thinking



3 Instructional design



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Proposed activities

1. **Procurement process** to select local Palestinian artists or design bureaus
2. **Preparation** of intra & extra-curricular **activities** in the schools, to design artworks and to design public spaces
3. **Execution** of intra & extra-curricular **workshops** in each school
4. **Procurement process to create/rehabilitate and equip STEAM labs** in 3 secondary schools to produce the artwork for all schools
5. **Finishing of final artwork** in collaboration with students, execute works for public spaces
6. **Training of teachers** by the MoEHE to continue using the STEAM labs within the curriculum & assure training on safety procedures
7. **Execution of additional extracurricular workshops** to increase life skills in particularly vulnerable schools
8. Organise event for the school community to **unveil the artwork**