

Toward an Interactive Science Center in Palestine: Vision, Needs and Design



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A.M. Qattan Foundation

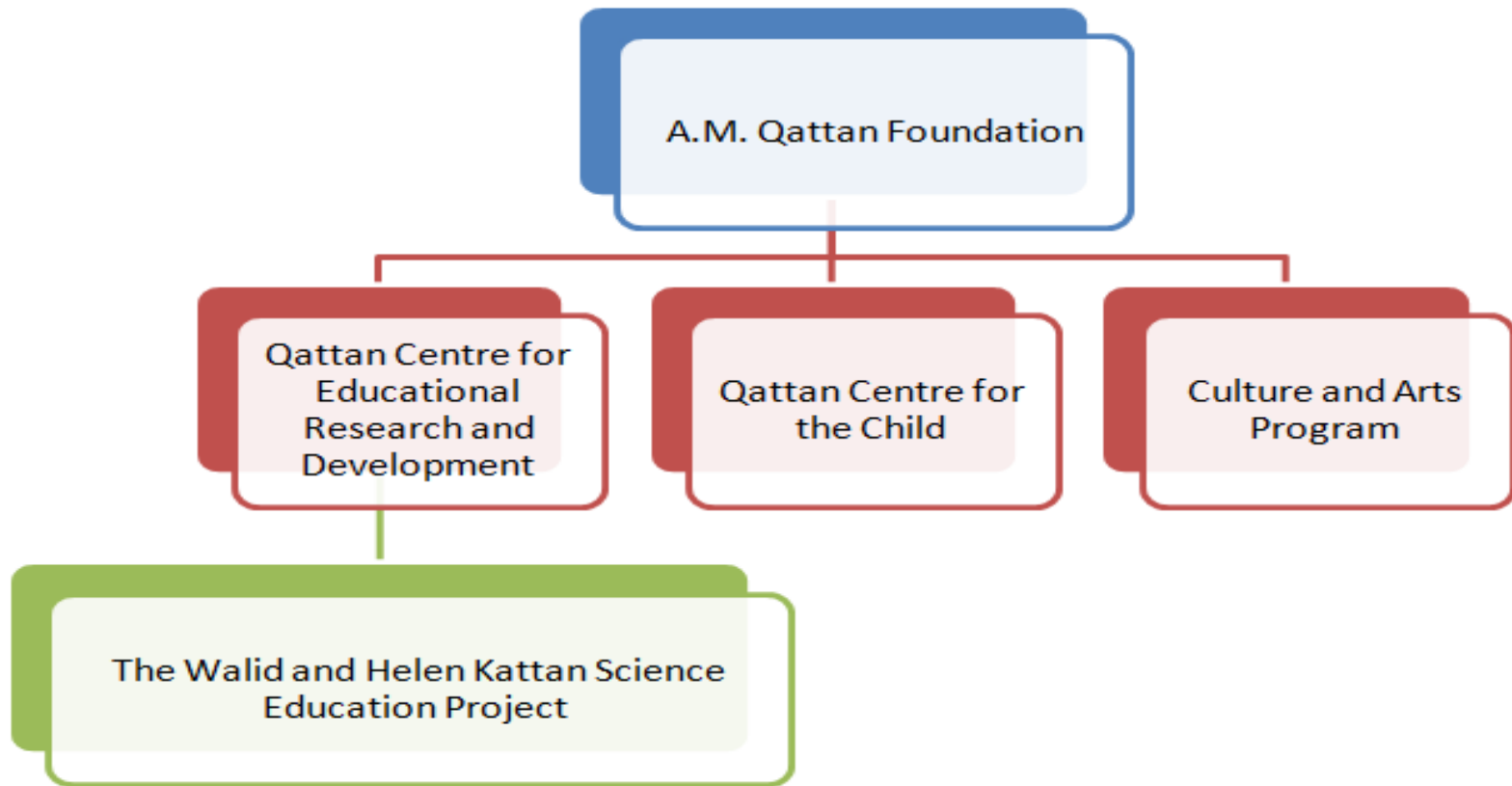


A just, free, enlightened and tolerant society with a global presence; one that embraces dialogue and is a producer of knowledge, art and literature.



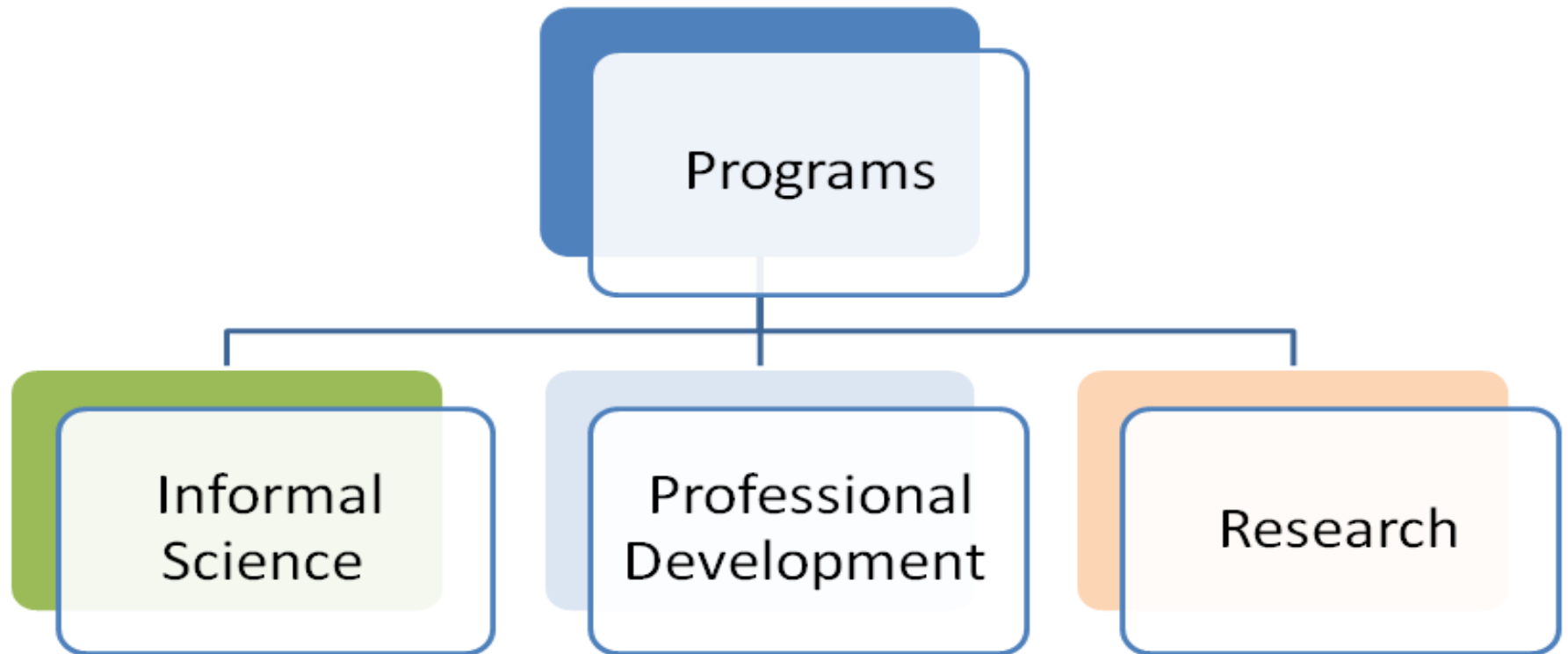
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- **Aim:** Improving the quality of science education in Palestine's schools and effectively transmitting its value into the Palestinian society through informal/free choice learning opportunities

The Walid and Helen Kattan Science Education Project



The Informal Science Program

Contributing to scientific culture and promoting interaction between students, instructors and their communities about science



Science Cafés



Science Snacks

[illegible]

Science Films Festival

The Informal Science Program



Social Networks as Informal Learning Venues
"Creative Minds" Facebook Page



Real-time Monitoring of Scientific Events

Why a Science Center in Palestine

- Science Education in Palestine
 - Traditional (A.M. Qattan Foundation, 2011; Wahbeh, 2003)
 - Lack of interest, involvement and participation in science and scientific research (Hassan, 2000; Maziak, 2005)
 - General lack of science culture in the Palestinian society



Need for Informal Science Learning Venues

Envisioning Science Center in Palestine



Processes towards the Master Plan



A focus group session with teachers at Nilin Teachers Center



Dr. Silvia Casini leading the Art-Science Cross-fertilization Workshops

Processes towards the Master Plan

- Consulting the Exploratorium:
 - Regular meetings via video conference
 - Preparatory workshops
 - Master planning workshop in Palestine



Scientists, artists, designers, museum professionals, stakeholders, and teachers working together during the master planning workshop for the Science Center

Master Plan

- **Vision**

A hub for learners, a place that encourages learning and engagement in science for all types of learners.

Master Plan

- Envisioned Role of the Science Center:
 - Shifting the culture of learning from **passive to active**
 - A new culture of learning where the cultured **interdisciplinary approach** is preserved and developed
 - Encouraging the development of a Palestinian society that is **engaged in science** and **knowledge making**
 - Engaging learners in **personal emotional experiences** that allow for a bond between them and the knowledge they create and experience
 - Sparking and sustaining **curiosity** about **science, arts and their integration.**

Master Plan

- City of Ramallah
 - Centrality
 - Accessibility
 - Center for Cultural and Leisure Activities



Ramallah City



Location of Ramallah

Key Audiences and Attendance Potential

Why Palestinians may want to visit such a place?

"The science centre has to serve the desires of all ages from children to scientists so that all visitors can find what they like."
" - Teacher

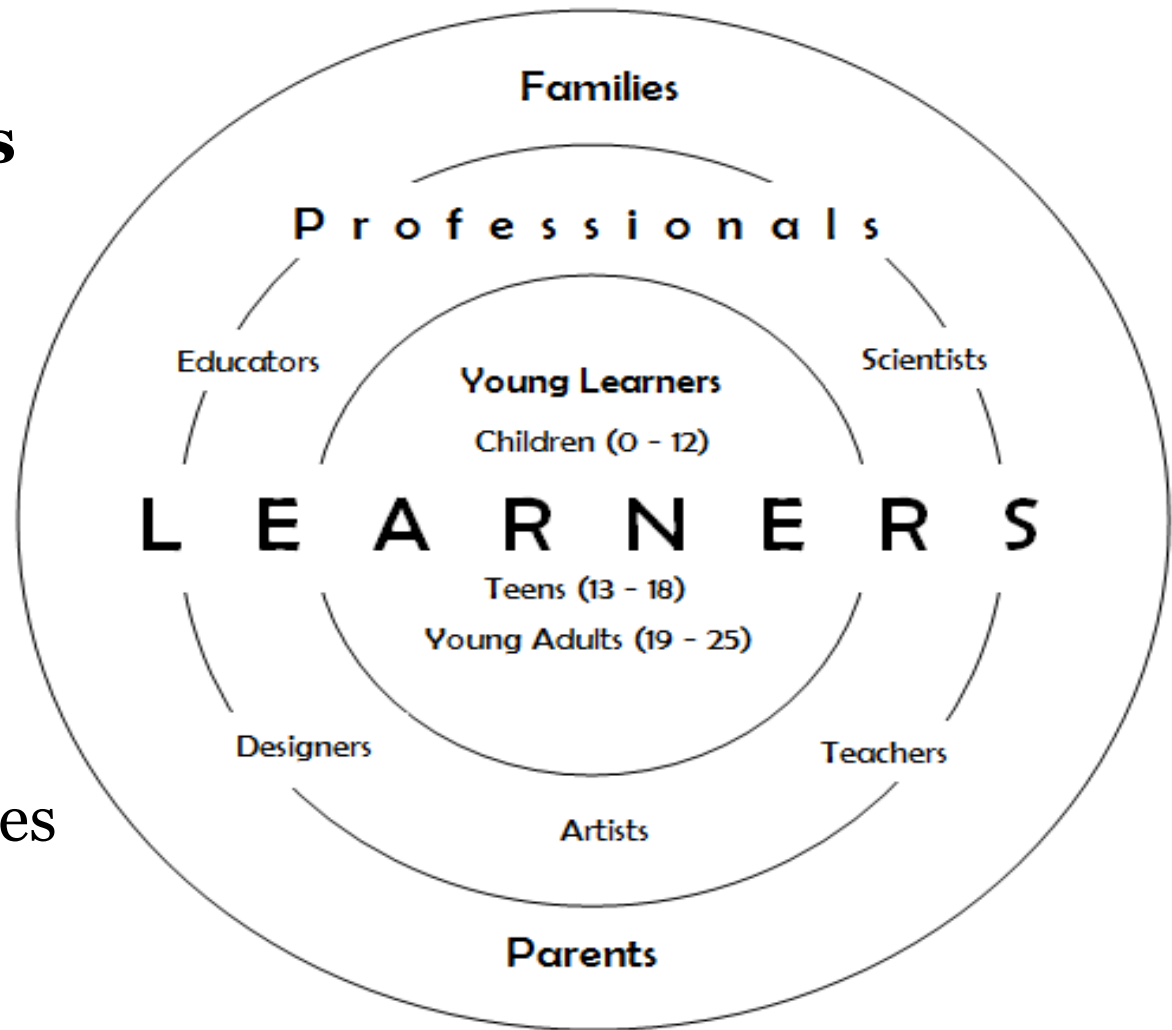
"I need a place where I can practice and feel things."
" - Mustafa, a teenager from Ramallah

"An opportunity to take time, learn things and come back." -
International Art Academy
Director

"I love science, but didn't enjoy learning it in schools, so I will bring my child to the center to learn science differently."
" - Parent

Key Audiences and Attendance Potential

- **Learners of all Ages**
 - Young Learners
 - Professionals
 - Teachers
 - Educators
 - Artists
 - Scientists
 - Designers
 - Parents and Families

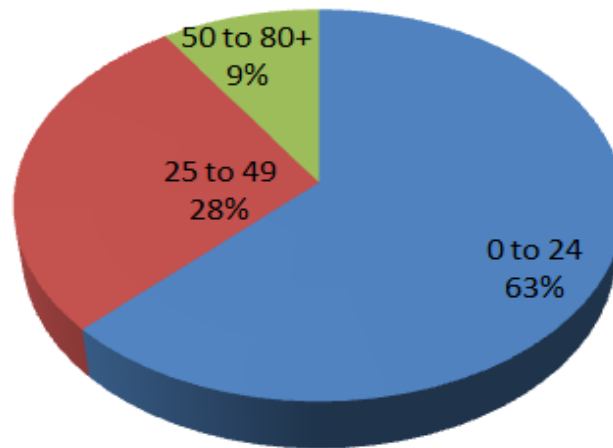


Our Audience at the Envisioned Science Center

Key Audiences and Attendance Potential

- Young Learners
 - Children (ages 0 - 12)
 - Teens (ages 13 - 18)
 - Young adults (19 – 25)

Distribution of population in Palestine by age group



About 63% of the Palestinian population is comprised of young learners

Source: The Palestinian Central Bureau of Statistics (Mid-Year 2013)

Programs, Exhibits and Outreach



Programs, Exhibits and Outreach

- **A Research Program**

- Evaluation
- Innovation

- **Art and Science Program**

- Artist in residence/Artist in the Scientific Laboratory
- Re-interpretation of an existing collection
- Borrowing already existent art-science exhibitions
- Formative workshops and seminars for the stakeholders

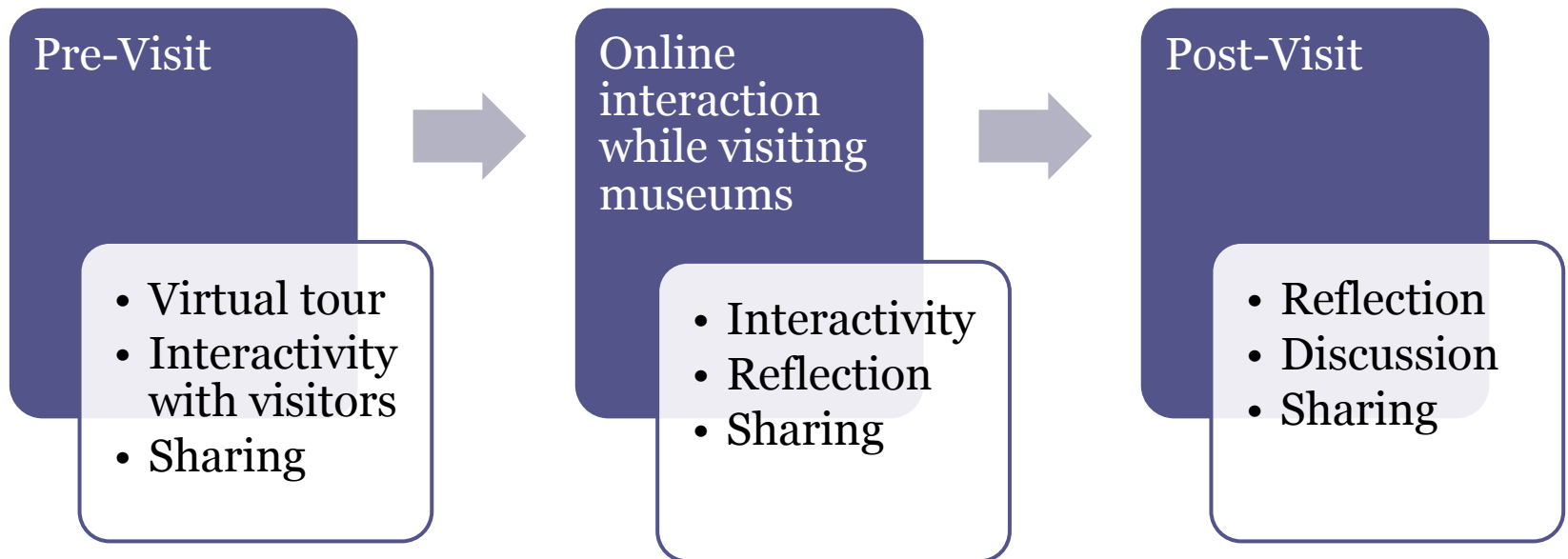
Programs, Exhibits and Outreach

- **Temporary Exhibits**
 - Thematic and more phenomena based
- **Permanent Exhibits**
 - The Palestinian Landscape and Environment
 - Human Perception and Social Interactions
 - Physical Sciences / Notions
 - A Science Garden



New York Hall of Science's brand-new Design Lab; photo by Andrew Kelly

Social Media in Science Communication

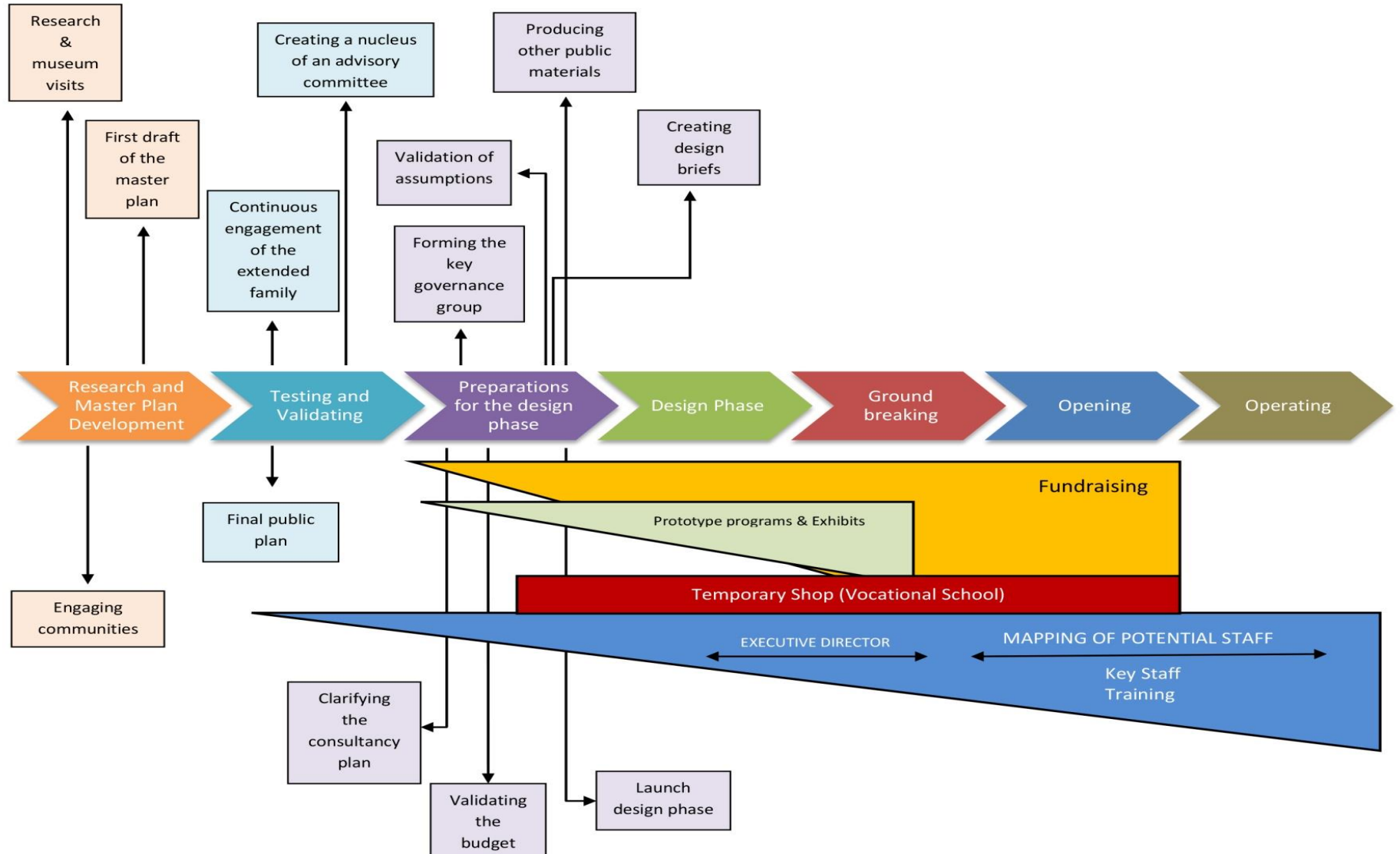


Social Networks in Science Communication

Challenges

- **Occupation**
 - Checkpoints
 - Import barriers for materials and equipment
 - Import restrictions for some machinery
 - Border restrictions for visitors
- **Lack of Contiguity between the Palestinian Territories**
- **Lack of Funding**

Future Steps





Thank You

<https://www.qattanfoundation.org>

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