Please find below information on the other entity/project which is a part of the Moringa Partners Platform - STEM Clubs for Children Under Six.

STEM Clubs for Kids seeks to ensure that children under six can have access to early childhood development. We introduce science education through STEM (science, technology, engineering, Mathematics) to the millions of children under 6 globally with no access to early childhood education.

# Key facts

- 1 Early childhood is the most important phase for overall development throughout the lifespan.
- 2 Brain and biological development during the first years of life is highly influenced by an infant's environment.
- 3 Early experiences determine health, education and economic participation for the rest of life.
- 4 Every year, more than 200 million children under five years old fail to reach their full cognitive and social potential.
- 5 There are simple and effective ways for families and caregivers to ensure optimal child development.

During early childhood (from the prenatal period to eight years of age), children undergo rapid growth that is highly influenced by their environment. Many challenges faced by adults, such as mental health issues, obesity, heart disease, criminality, and poor literacy and numeracy, can be traced back to early childhood. (Source: WHO)

Nutrition of children and parents are a key factor in the development of the early education programme. Moringa will be one of the preferred nutrient dense plants promoted.

MGlasgow, 19 March 2013



MG Associates, Inc - We Provide Customizable and Scalable Solutions - Deliverables are Consultancy Services



STEM Clubs for Kids is a trade name of MG Associates, Inc <u>http://www.stemicuglobal.com</u>

### **STEM-ICU Clubs for Children Under Six**

Programme

# Establish ICUs (Imagination and Creativity Units) for the introduction of science education to children under six

STEM Clubs for Kids customize early childhood education according to the culture of the countries/regions/locations and establish Imagination/Innovation and Creativity Units (ICUs) where the children would play at becoming scientists, technologists, engineers, mathematicians through science education.

It is known that children are at their most creative under six. Our focus is to help shape their minds and mindsets with possibilities and ways to release their creative instincts; and where they have the freedom to imagine that they are and can become whatever they want to be.

ICUs will help enable these aspirations by exposing childen, globally, under six to STEM - science, technology, engineering and mathematics, so that all societies would have the technical and professional competencies for their peoples to ably fill a negotiating space in the next global encounter – e.g. Space Exploration



"Imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the entire world, stimulating progress, giving birth to evolution." Albert Einstein

*"Education is the most powerful weapon which you can use to change the world" Nelson Mandela* 

"Treat people as if they were what they ought to be and you help them become what they are capable of becoming." — Goethe

" A little learning, indeed, may be a dangerous thing, but the want of learning is a calamity to any people. ..lt is easier to build strong children than to repair broken men " Frederick Douglass

#### Introduction to the STEM-ICU Concept/Programme

#### What IT Is:

- An add-on, almost like an APP, to enrich existing early childhood programmes, eg HeadStart

- A methodology which involves parents and guardians to become interested in the child's activities at school, at home, in the community

- A **mobile method** providing early childhood education and of involving parents, guardians, communities, young entrepreneurs to market early childhood activities the APP in outdoor spaces, eg, malls, parks, museums...**creating public-private partnerships** with communities and the public institutions

- A novel way to reintroduce the concept of play back into a child's environment; and to collaborate with science labs, science museums, Institutes of Technology...

#### ICU as generator of the STEM method of early learning

This is the essence of the model - **the establishment of imagination/innovation and creative units (ICUs) wherever the child is** - the home, the community centre, the school, the church, etc; . ICUs have a natural cultural adaptability and is customizable, not only for what is learnt but how learning evolves with the child, the teacher, the parent/cuardian/community, given the different socio-enviro-economic situations of the child (low income, upper income, inner city, suburb..) The intent is to reach the marginalized and inner city child as a start

## ICUs facilitate and enable:

- the full expression of the child (creativity, imagination, control) through play - revisiting playtime and play to increase interest in learning

- the transferability and scalability of the concept/APP to other initiatives locally, regionally, nationally and internationally

- the development of indicators for monitoring and evaluation of the application of the programme with attention to its longer-term advantages/disadvantages

-the immediate application of the programme in ongoing HeadStart programs in the 5 cities which won the Mayors Initiative (NY, Philadelphia, Ptovidence, Houston, Santa Monica, Chicago), complemented by Mayors' activities in other countries (Senegal, Mali) and the recent Programme trial in Binghamton

- the training and deploy of volunteers from science labs; science students from local schools; the involvement of Institutes of Technology as well as professors of STEM disciplines, etc...



## ICUS - Nutrition and Early Learning

Those early childhood education centres in locations where **Moringa** is grown will be encouraged to plant Moringa and promote its use to children, pregnant women and nursing mothers. Senegal and the Philippines provide Moringa in school meals; encourage mothers pregnant and nursing to use Moringa. Moringa is also grown in school compounds.



Moringa Partners <u>http://www.moringapartners.com</u>