

All things **STEAM**'d uP³

● empowerment

news ● articles ● events ● learning

STEAM, that's STEM + the Arts

Science, Technology, Engineering, the Arts & Maths

FU

<https://futuristSTEAM.co.uk/mag/002>

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seftontrust](https://abundancecentre.org/seftontrust)

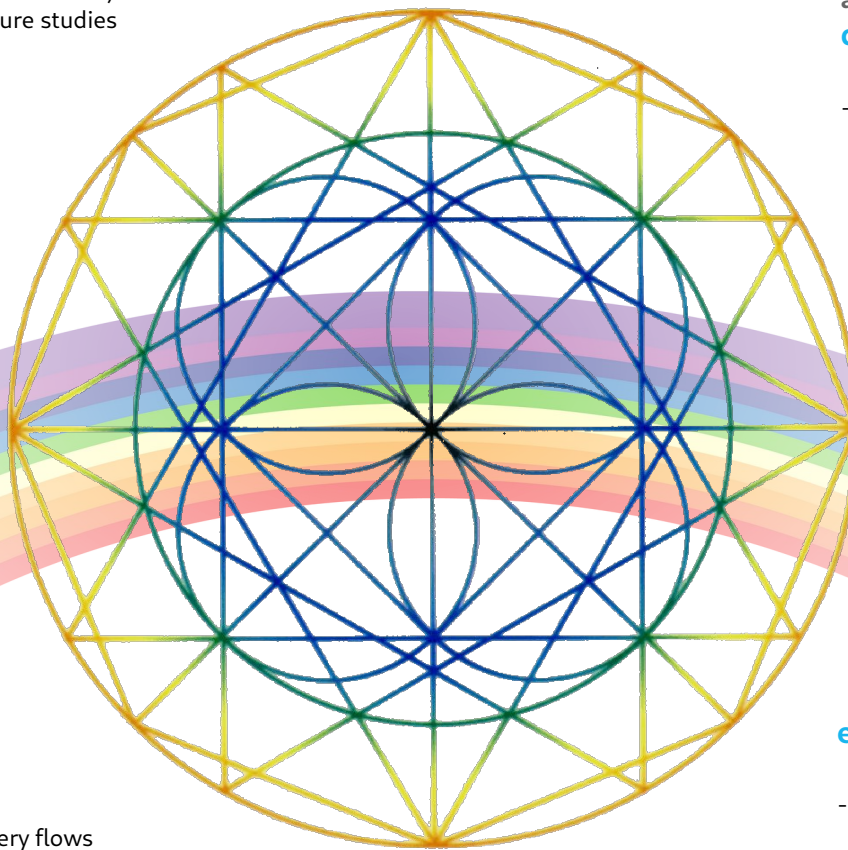
- trike/cycle building (from scratch)
STEM project, Sefton, Liverpool Area.

beeglobal.hns.to

- Level Being 9 Apiary (Tottenham)
- learning STEM and nature studies
through beekeeping

[abundancecentre.org/
darkandwild](https://abundancecentre.org/darkandwild)

- social gathering



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levelbeing9](https://abundancecentre.org/levelbeing9)

- cadets in learning mastery flows
- community science lab

ecosysmaat.app

- DLT / web3 / crypto asset
enhanced learners'
cooperatives panAfrica.

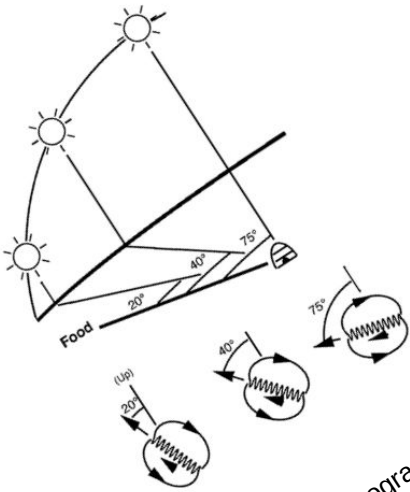
STEM
+ Art

STEAM

[blackopenuniversity.org/
moodle](https://blackopenuniversity.org/moodle)

- elearning, our learning management platform
- STEAM'd uP Learning pedagogy courses
for parents, educators and teachers
- hair structure science course
- warrior dance (African martial arts science)

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This year we launched a special programme: **Revealing the Science of Honey Beekeeping**. The programme started as part of our annual British Science Week offering for the development of STEAM'd uP Learning, that's STEM + the Arts; Science, Technology, Engineering, the Arts and Maths learning. We have now opened the **Level Being 9 Apiary (Tottenham)**, developing a core team of young beekeepers and engaging the public in all things STEM around the practice.

This special programme has been prepared to further **educate** and **inspire**:



- Our LevelBeing9 cadets
- Young people, parents and families
- Teachers and other educators
- Beekeepers globally, especially in the UK, Africa and the Caribbean
- Those with STEM interests, interested in creative approaches to learning
- Schools (primary, secondary, SEND), colleges and universities

Hair Structures & the Alpha Helix Design

Learn the science of hair structures through natural STEAM'd uP Learning approaches to education and personal insight

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Unique, deep and meaningful knowledge, from the hair root to the atomic level and beyond. Learning made easy for you.

STEM + Art STEAM

Frame Making Workshop

Supporting Honey Comb Production

Level Being 9 Apiary (Tottenham)

<https://beeglobal.hns.to>

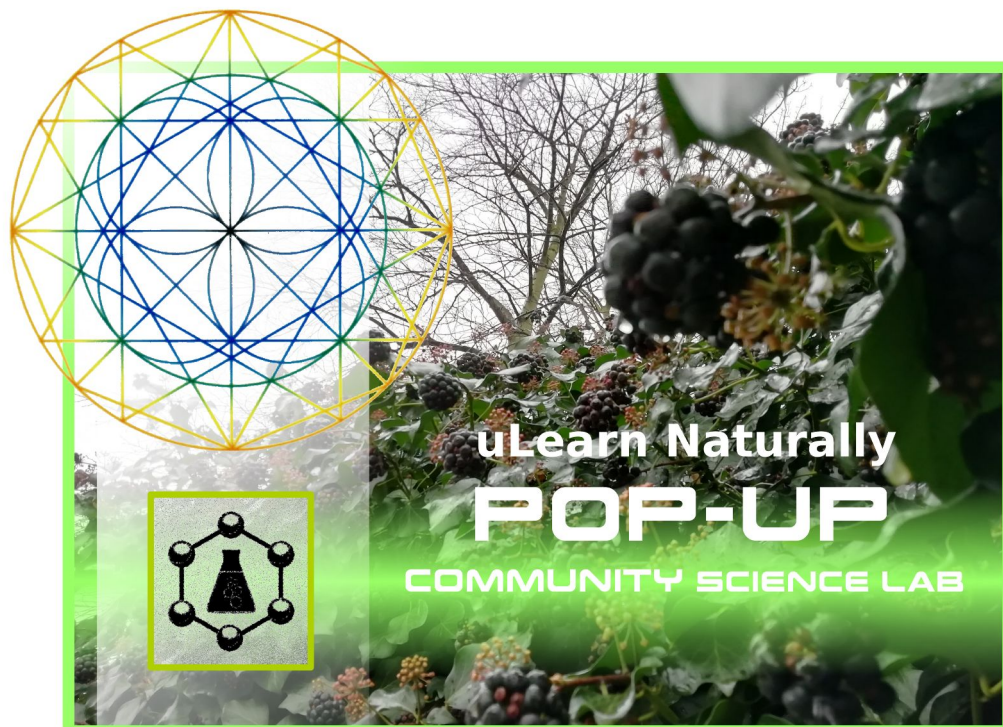


We are interested in establishing community science labs.

We have demonstrated the value of:

- pop-up labs for children
- science around the practice of beekeeping
- science around hair structures

What would you like to explore in a local
community science lab?



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Recumbent Trike Self Build

Fabricating the Main Tubes Sections

Introduction

This section focuses on building the main tube section of the Thunderbolt. The main-tubes consist of .065 inch thick 2-inch diameter tubing. If a post heat treat is not performed the tube wall thickness should be increased to .083 inches or thicker. Included with the two inch tubing, is the fabrication of the pinch collets, idler/steering mounts and knuckle faceplates. This section accounts for the bulk of the trike.

Required Materials

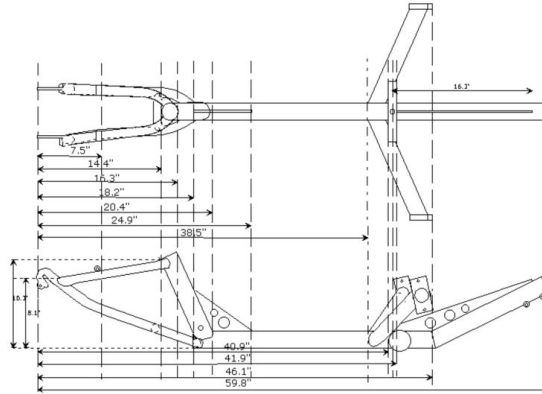
The following materials are required for this section:

- 2" diameter x .065" thick tubing x 85" length. If no post heat treating increase wall thickness to .083".
- 5/8" diameter x 7.5" length Aluminum Rod
- 1/2" diameter x 8" length Aluminum Rod
- 2" x 8" x .250" thick aluminum extrusion
- 2 ea. 7/8" seat clamps, aluminum
- Misc. wood stock and hardware for building temporary frame fixture

Required Tools

The following tools are needed to conduct this section:

- Drill Press
- 5/16 x 24 TPI SAE Tap
- 1/2" SAE drill bit
- 3/8" SAE drill bit
- 5/16" SAE drill bit
- #1 SAE drill bit (.2720")
- #U SAE drill bit (.3680")
- 5/8" hole saw
- 7/8" hole saw
- 1" hole saw
- 1.5" hole saw
- 2" hole saw
- Hack saw or metal band saw
- Misc. files and emery cloth
- Stainless Steel Wire Brush
- TIG Welding apparatus using 100% tungsten 1/8" diameter tip

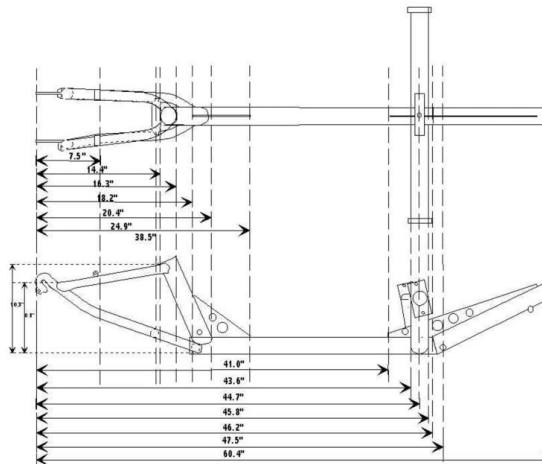
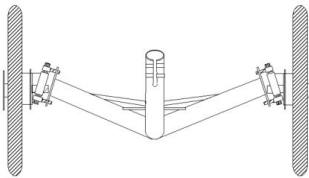


Objective

This section covers the following accomplishments:

- Fabrication of Main Frame Subassemblies (gussets not included)
- The cut-out and shaping of all 2-inch tube sections
- Welding of all 2-inch tube sections and Frame Subassemblies

The completed assembly drawings (including the sheetmetal) are shown below along with all applicable angles and dimensions.



BIKECAD



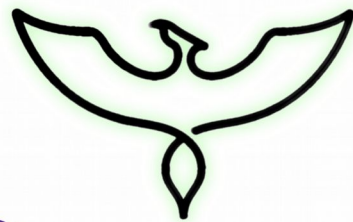


uLearn Naturally
STEAM'd uP Creators' Hubs (Sefton)
that's STEM + the Arts

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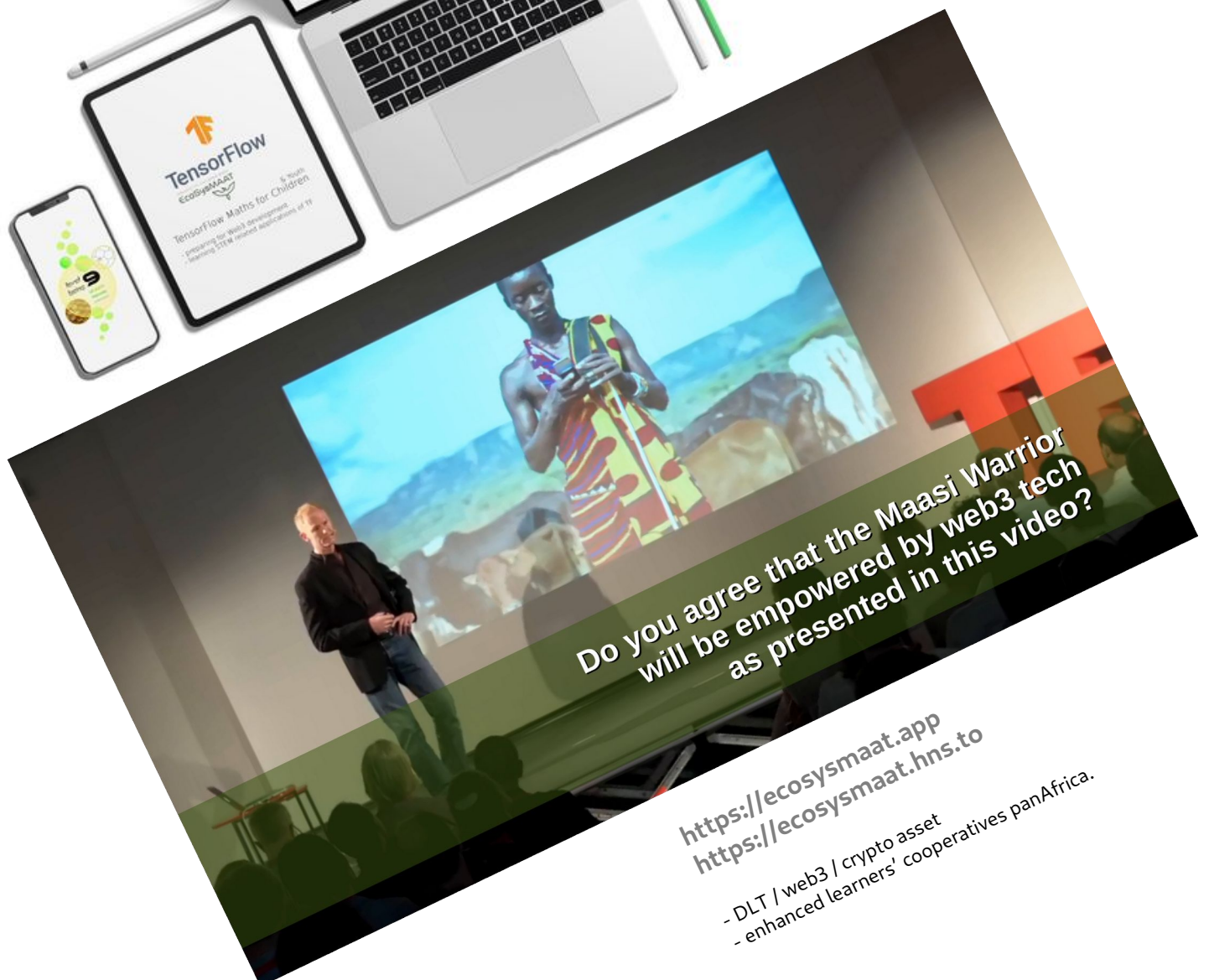
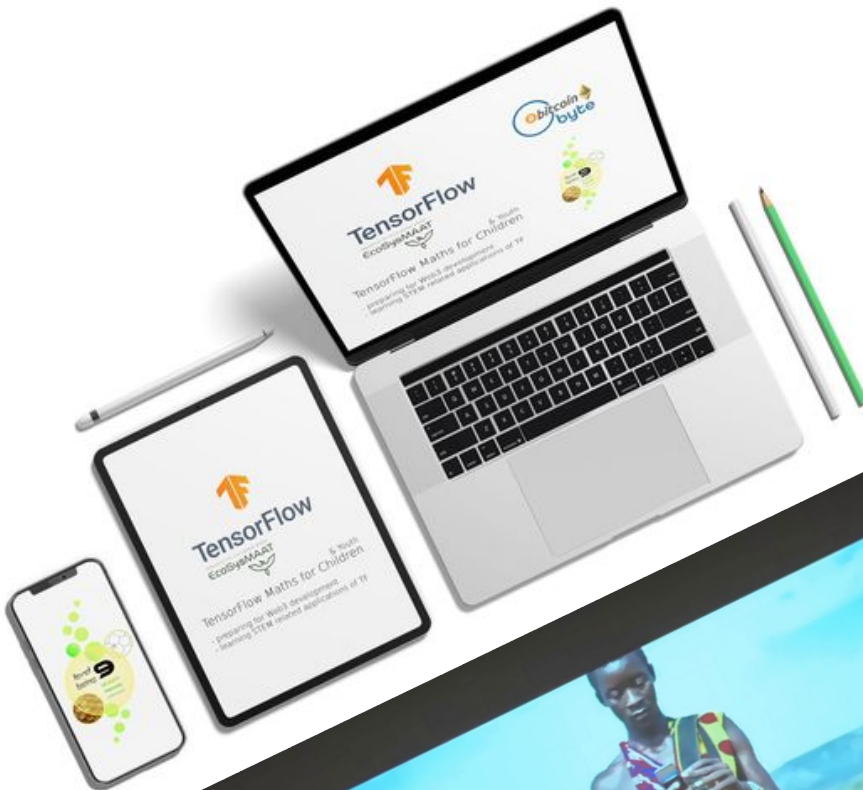
education for true global power

EcoSysMAAT



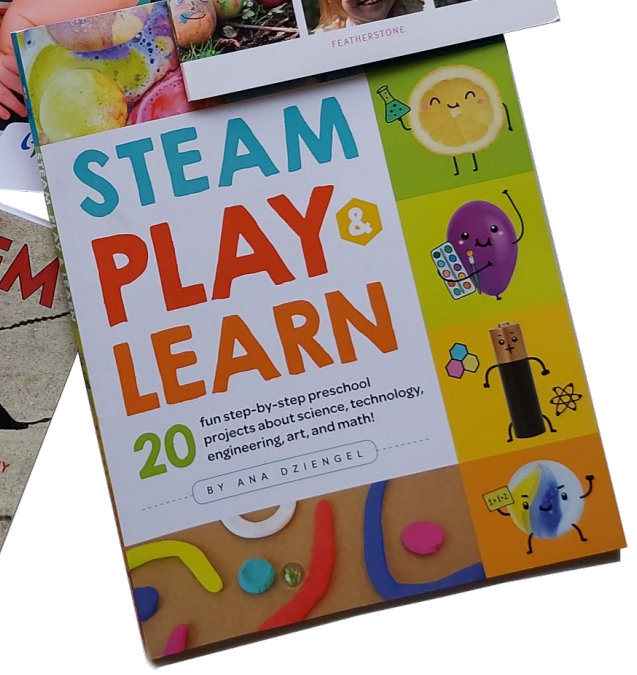
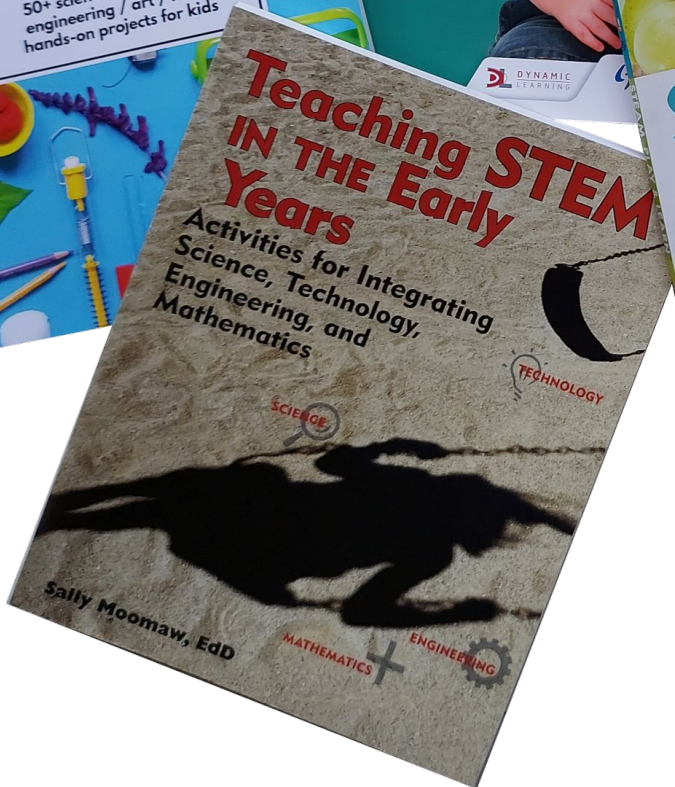
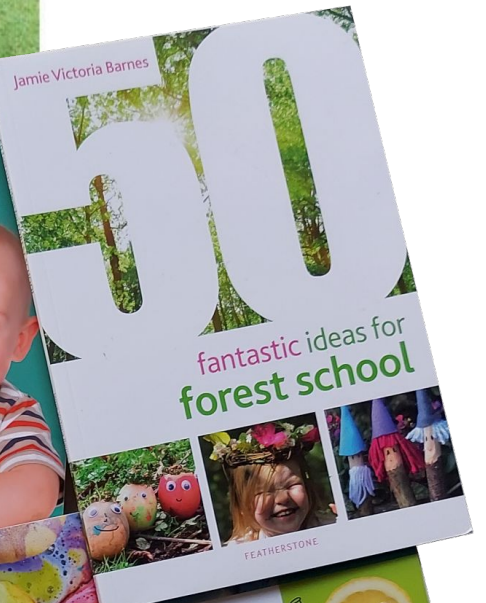
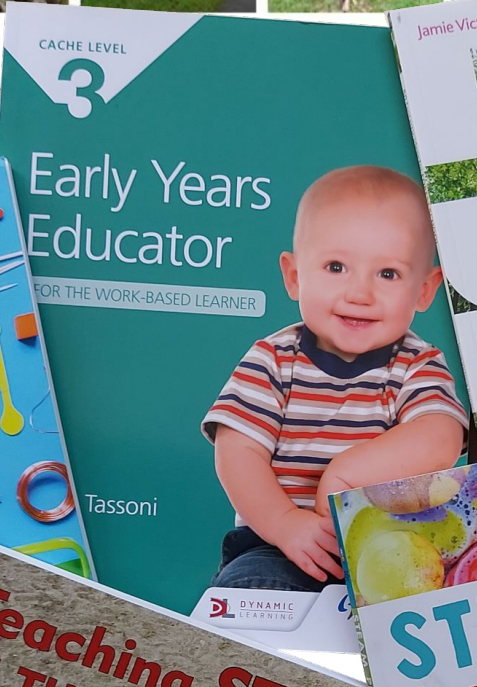
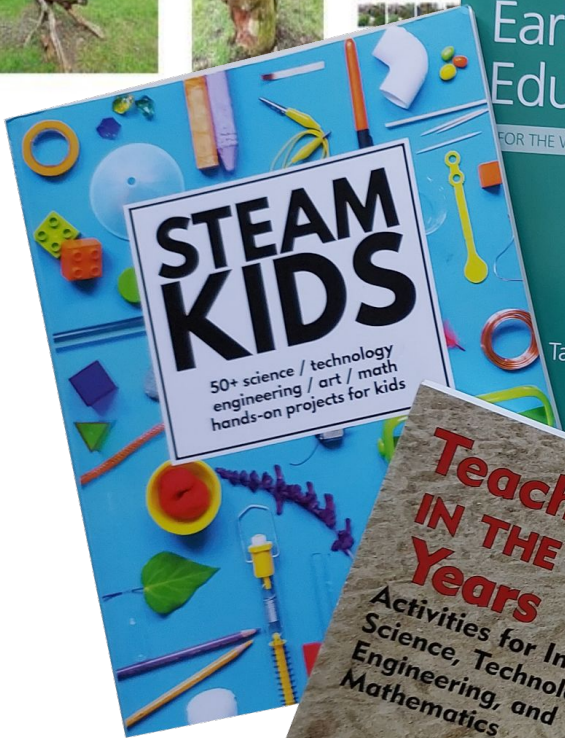
<https://ecosysmaat.app>

The basic mission of **EcoSysMAAT** is to address current global regional imbalances in access to STEM knowledge and research; to build a strong core global equity in STEM consciousness and competence, through **STEAM'd uP Learning** approaches to education; and to create equality of access to world-class STEM learning, with the power to stimulate "home-grown" STEM solutions to local problems. We seek this through **1)** strategic global partnerships with the leaders of blockchain (web3 & crypto) technologies and **2)** community-led and family-led learning groups and initiatives organised as local cooperatives. Our plan is for this to function globally.



<https://ecosysmaat.app>
<https://ecosysmaat.hns.to>

- DLT / web3 / crypto asset
- enhanced learners' cooperatives panAfrica.



uLearn Naturally Centre

(Tottenham EYE)

Nurturing **EYE** Insight; Assuring Excellence in **Early Years Experiences**.

We are developing a centre where we can provide early years CPD training; within the CACHE/NCFE frameworks. From this centre we will deliver an accredited Early Years Educators' programme that develops practitioners in STEAM'd uP3 Learning (Unifiedknowledge) approaches to early years experiences and education; a 2-3 year course built upon the standard Level 3 Diploma for the Early Years Educator.

Our centre is being prepared to host:

- 1) Cooperative EYE (Haringey); an associated learners cooperative for childminders, early years workers, parents and those with related EYE interests,
- 2) a childminder agency and
- 3) weekly Stay & Play services.

-

**Our overarching centre theme is
STEAM; that's STEM + the Arts**

**We will deliver consistent and
high quality stay & play provisions**

**We will facilitate our STEAM focused
childminder agency and learners' cooperative
for workers in the "early years experience"**

**We will provide professional development
for early years workers (and parents)**



abunDANCE in Schools

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Courses at Abundance Centres:

Get more info here:

<https://ulearnnaturally.hns.to>

Volunteering info - we need:

- project administrators
- marketing and public relations team members
- media and ICT team members
- work placements

Full training provided.

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THE FUTURIST

a STEAM'd uP³ Magazine

Science, Technology, Engineering, the Arts and Mathematics

