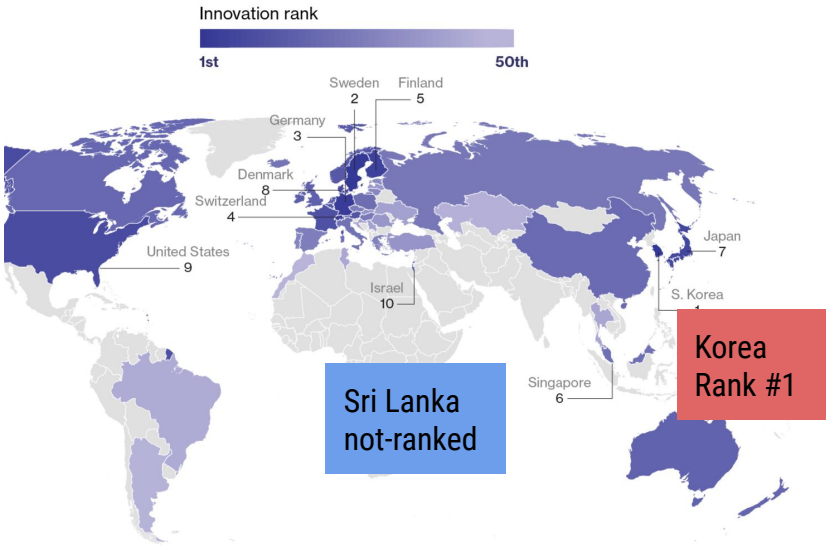
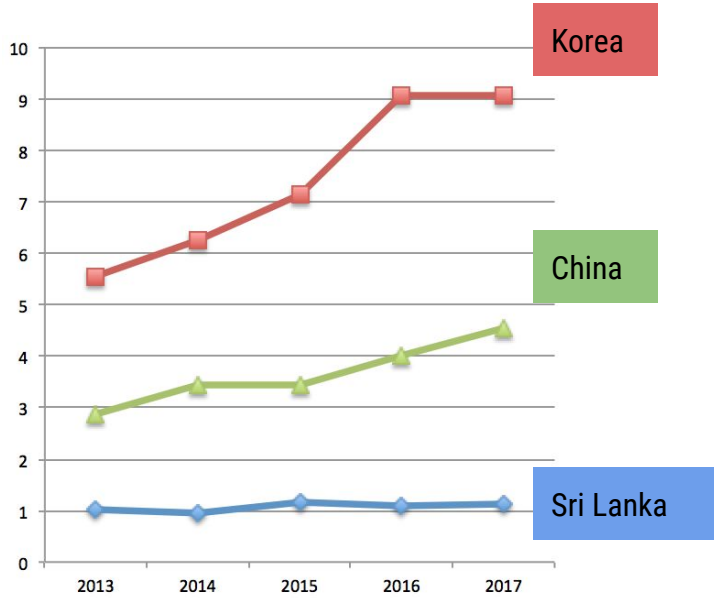
The Makerspace of Young Innovators



Bloomberg Innovation Index

Sri Lanka: not-ranked



Global Innovation Index

Sri Lanka: 90/117

The dream of
every parent...

The reality:

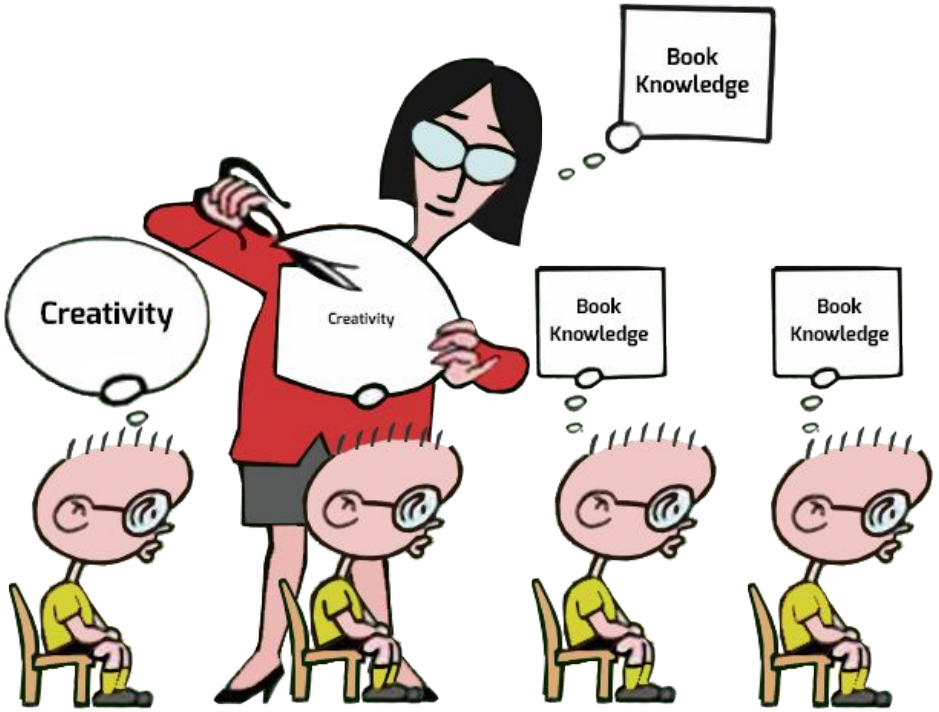
Kids have become

consumers of technology, not creators

Knowledge and compliance

centric education

Affects the creativity of students

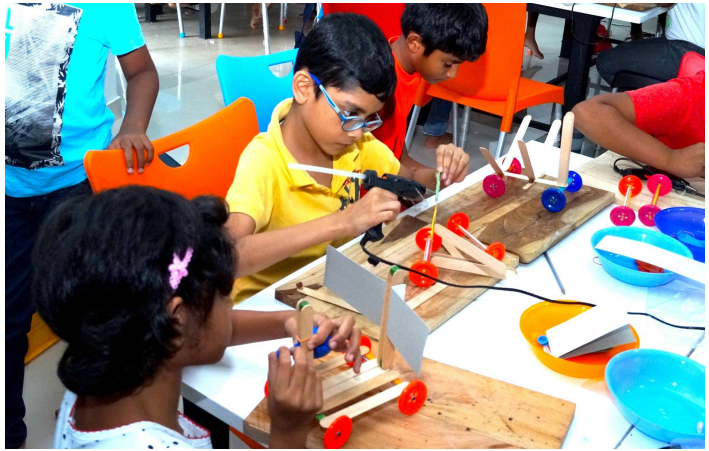


THE NEED OF THE ERA

Maker Movement

is now sweeping globally!

Sri-lanka's First Makerspace



igniter SPACE

6 Flagship MakerSpaces + 4 Partner MS

Narahenpita

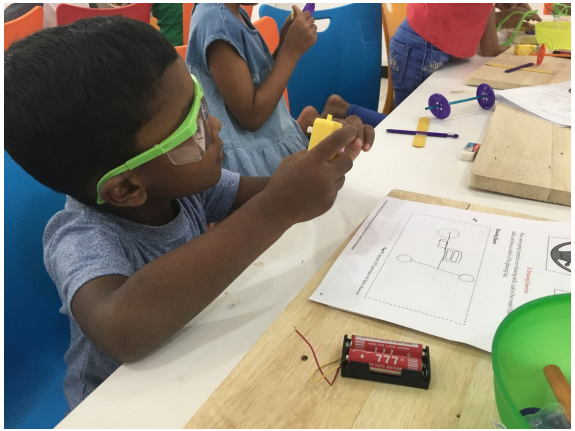
Negombo

Kandy

Moratuwa

Gampaha

Promoting, Creativity!



Accuracy vs. Play

Creativity is about making something original

What is known to be accurate cannot be original

To be creative one needs to take a chance of being wrong

Learnability!

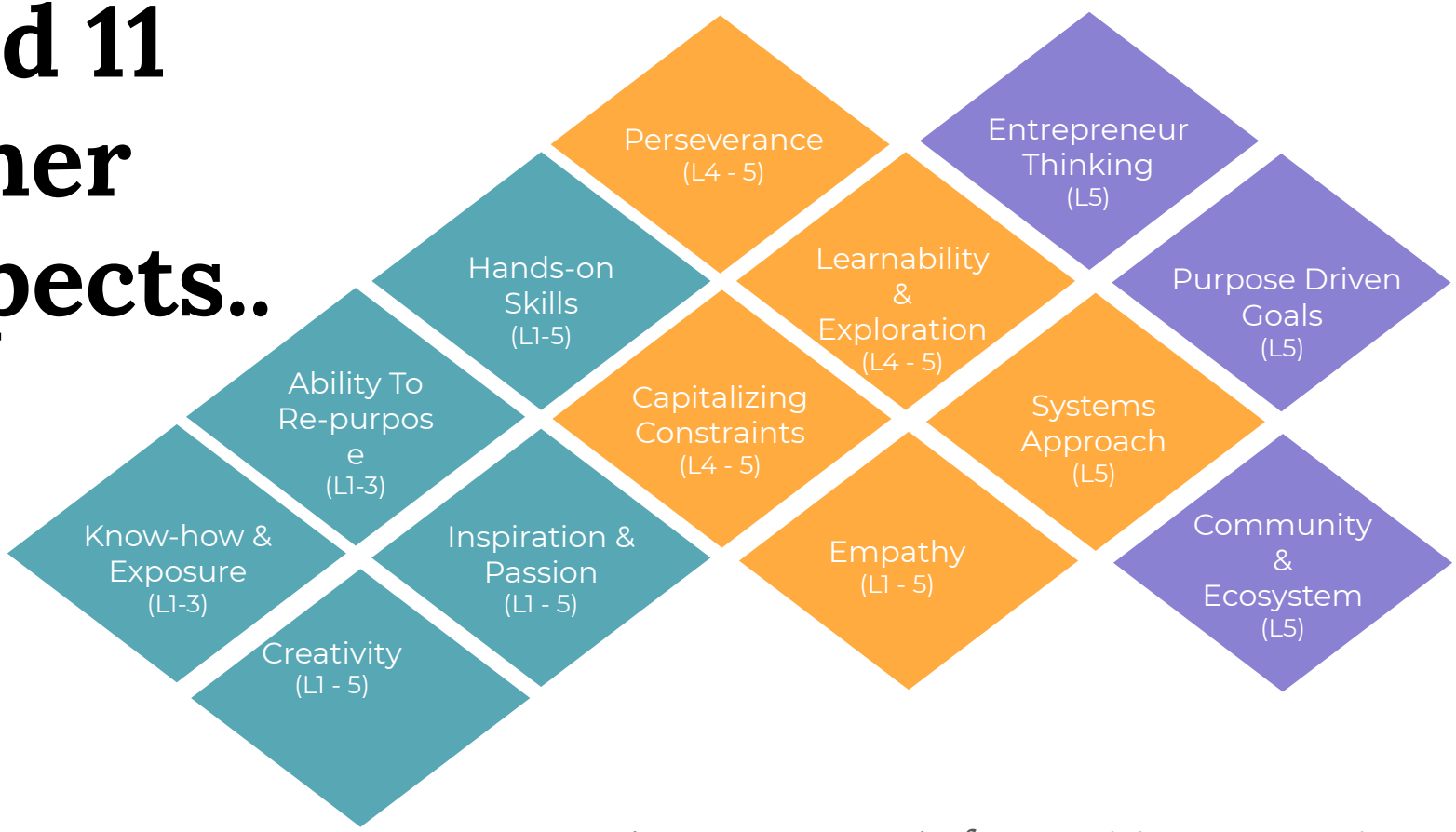
Teaching vs. Learning

One issue with just the knowledge is that its perishable

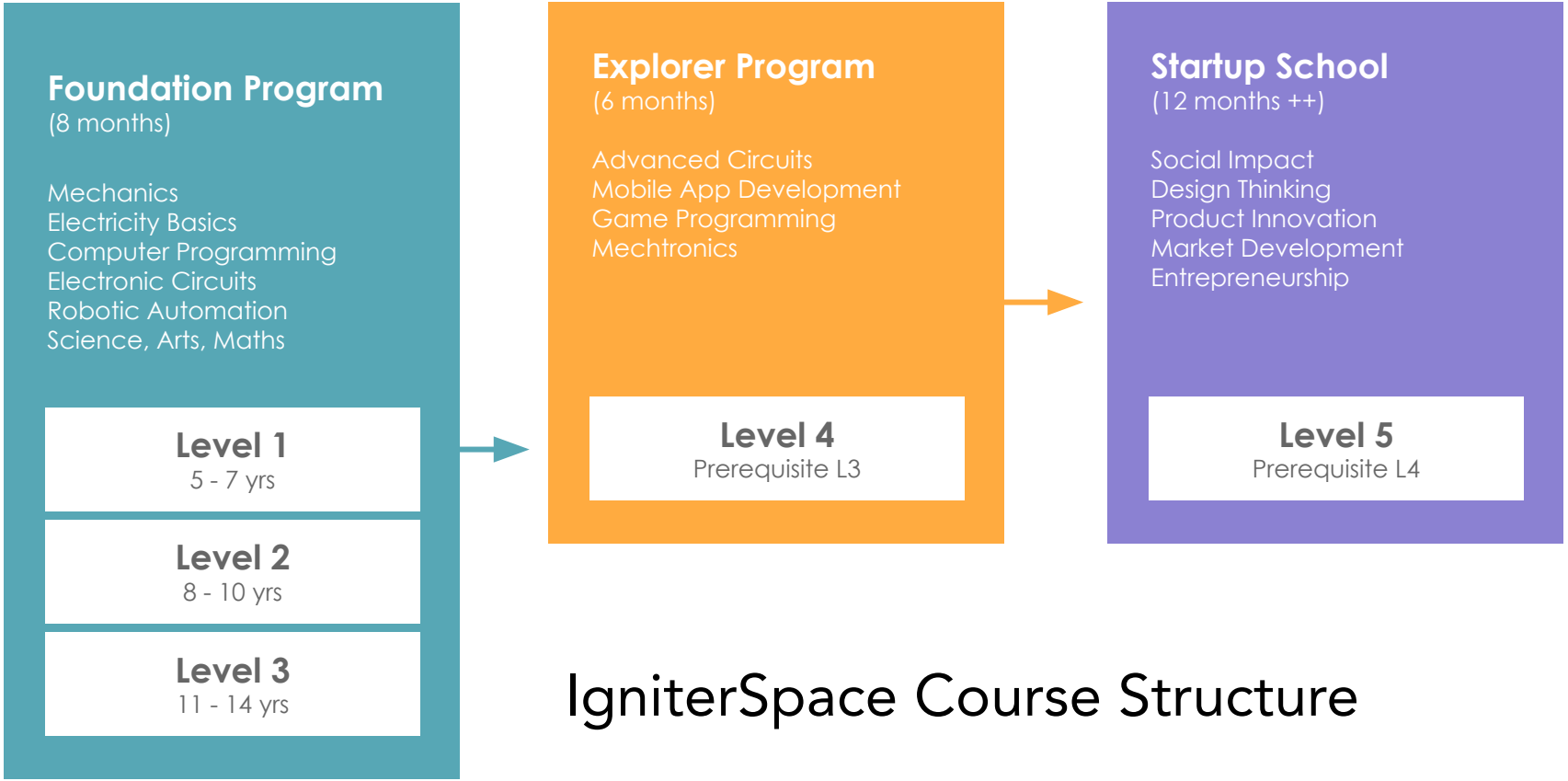
And knowledge is now a commodity

Ability to acquire knowledge effectively is more important

And 11 other aspects..

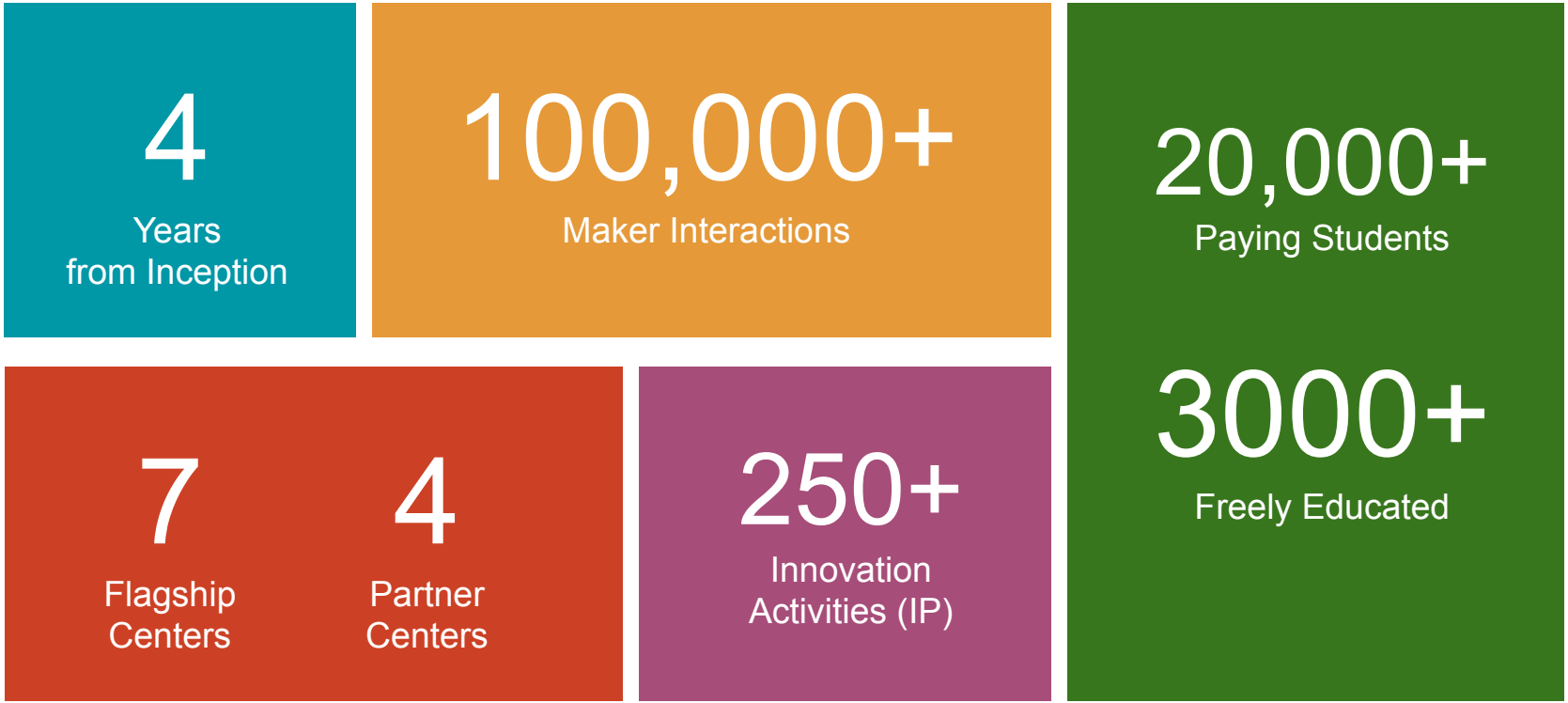


*IgniterSpace Matrix for **Inspiring Innovation***



IgniterSpace Course Structure

Validated by the numbers



Flagship MakerSpaces

Partner MakerSpaces

IgniterSpace

LOCATIONS

INTERNATIONAL LOCATIONS

Flagship MakerSpaces

Future Markets

Activities in the Innovation Program

Wave Motion
Biomimicry
Dicycles
Animations
Coding
Computers
Flight Dynamics
Usability
Inertia
Infrared Waves
Magnets
Mechanical Structures
Operation of a Dynamo
Peg & Slot Mechanism
Piston Operation
Pivots in Operation
Pneumatics
Stirling engine
Turbine Pump Mechanism
Vehicle Transmission System
Waterproofing
Reciprocating Motion in Robots
Robot locomotion
Robotic Actuation
Robotic Assembly Lines
Walking Robots

Debugging
Sensors
Game Creation
Hardware & Software
Microcontrollers
Problem Solving
Run Marco Run
Belt Transmission
Center Of Gravity
Conductivity
Diaphragm Pumps
Energy Transformation
Engineering Measurements
Collision
Basic Circuits
Batteries
Gear Motors
Jumper Wires
LEDs
Push Switch
Transistor - Amplifier II
Transistor - Switch
Two-way light switches
Vibration Motors
Voltage divider circuits
Empathy
Presentation Skills
Teamwork
Unique Selling Point
Bearings

Simple Buzzer
Switches
Basics of Pitching
Describing a Creation
Innovation Exhibition
Anti-theft systems
Appliances
Balance
Bouncing ball Motion
Cooling fan
Counterweights
Creating Vibrations
Dynamo
Elasticity
Electricity Generation
Energy
Force
Game Devices
Helicopters
Light
Making a vibration motor
Microtechnology
Newtons Third Law
Nuts
Paddle Motion
Potential Energy
IR Photodiode
LDR
Parallel Circuits
PIR Motion Sensor
Resistors
Series Circuits II
Soldering
Tilt Switches II

Elastic Potential Energy
Probability
Propellers
Push and Pull forces
Reel
Rotary Motion
Sanding Machines
Self Stirring Mugs
Sharpening Objects
Siege engines
Simple Pistons
Simple Pivots
Snap Action Switch
Sound Energy
Spinning Motion
Stability
Storing Energy
Structure Building
Structures
Types of Boats
Unbalanced Rotation
Use of Hydraulics
Vehicle Chassis
Wearables
Winch Mechanism
Automation
Circuit Diagrams
DPTT switch
Electrical Current
Electronic Circuits
Electronics
Infrared Communication
Integrated Circuits

Biomimetic Design
Cooking Robots
Humanoid
Introduction to Robots
LDRIC the Golf Robot
Robots in Movies
Robots in Sports
Types of Robots
Cloning
Conditional programming
Countdown timer
Intro to the Scratch Platform
Intro to Variables
Iteration
Math in Game Development
Mouse click event
Pen
Scratch - Control
Scratch - Data
Scratch - Events
Scratch - Sensing
Scratch - Sound
Simple Collision Detection
Sprite creation
Sprites & Scripts
Uses of Computers
Scratch - Sprites
Scratch - User Input/Output
Scratch Platform II
Use of Variables
Bidirectional motor rotation
Breadboards
Capacitance

Projector Operation
Pull Back Motors
Reciprocating Motion
Renewable Energy
Shafts
Solar Power
Speeds of Rotation
Structural Integrity
Thrust
Turbine Structures
Use of Pivots
Use of Propellers
Use of Water Detectors
Uses of Forces
Wheels and Axles
CNC Mechanism
Drawing Robots
Legged Robots
Robotic Arms
Character Duplication
Coding - Instructions
Coding - Procedures
Coding - Repeat Until Loop
Collision Detection II
Coordinates
Game Physics
Game Physics - Vehicles
Scratch - Looks (Show and Hide)
Level Design in Games
Messages (broadcast & receive)
Multiplayer Games
Platformer
Programming Environments
Programming Languages
Random Events
Random Generation
Scratch - Collision
Scratch - Paint Editor
Capacitors

Applications of Buzzers
Applications of Switches
Arm Switches
Conductors & Insulators
Gears Mechanism
LED brightness
Measuring Current
Motors
Multimeter
Resistance
Series Circuits I
Tilt Switches I
Tone Generation
Transistor - Amplifier Basics
Accessibility
Portable Devices
Precision
Product Definition
Proof of Concept
Requirement Gathering
Target Markets
360 Motion
Actuation
Amphibious Vehicles
Applications of Elasticity
Balancing Weight
Bowling Machines
Buoyancy
Centrifugal Force
Clip on Devices
Elastic Potential Energy
Energy Conservation Theory
Gravity
Grip in Engineering
Hand-to-eye Coordination
Hydraulics
Lenses
Power generation
Projectiles

OFFERINGS:

Service Based

FlagShip
MakerSpaces

Per location:

- 400 Students,
- 6 months program,
- Revenue:~$90,000

B2C

Home & Retail

Maker Kits

B2B

Partner Orgs

MakerSpace in a Box
& School Curriculum

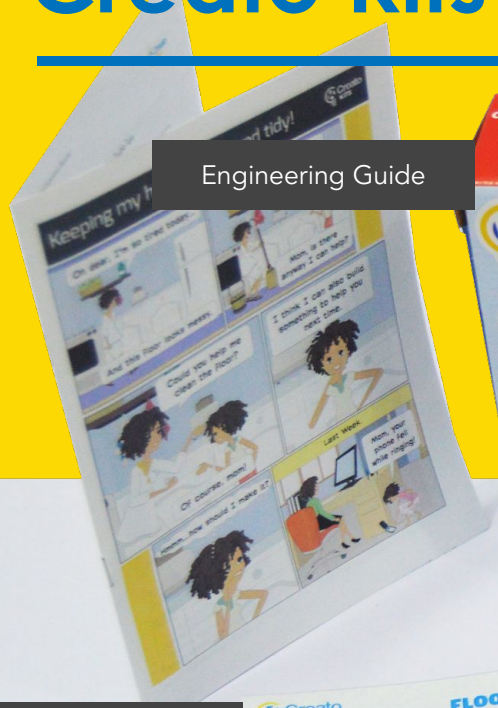
International Markets

Creato KITS

Retail

Creato
KITS
Online
Your Home Makerspace
www.igniterbee.com
igniter bee
Our Aim is to Make Creative Education Available for Every Child
WARNING:
www.igniterbee.com
Dual Brush Bot
Robot Time!
Doesn't the thing on top look just so exciting! Wondering what it is? Let's find out in this very fun activity. You will be building your very first robot. We will also be exploring a method of generating motion in a robot.
WARNING:
WARNING:
igniter bee

Creato Kits

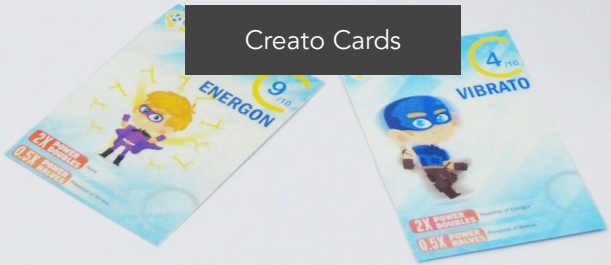


Engineering Guide

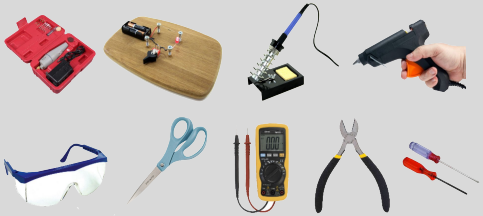
Component Kit

Innovation Comic

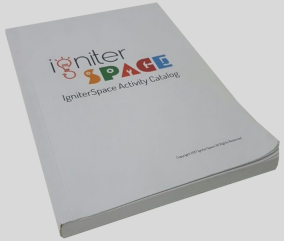
3D Card



Creato Cards



Infrastructure



Innovation Packs

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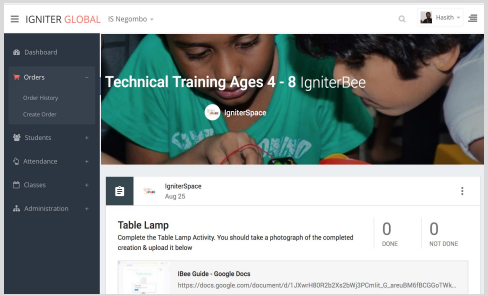
Franchised MakerSpaces



Software Platform

Equipments, components & Tools

General Tool wall with Tools

- ➔ Pliers
- ➔ Saws
- ➔ Scewdriwers
- ➔ Wrenches
- ➔ & Many more tools

** Labelled for ease of Use

Pliers

Rivet Gun

Nose Plier

Combination Plier

Hope Punch Plier

Wire Stripper

Clipping Plier

igniter SPACE

Screwdrivers

Phillips-Head

Flat Screwdriver

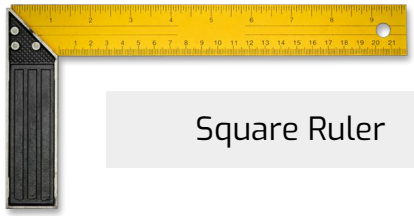
Electrical Tester

Fabricating tools

Hand Saw

Hack Saw

Papercutter



Square Ruler

Measuring Tape

Hammer

G-Clamp

Spirit Level

Wrench Tools

Wrench Kit

Allen-Key Set

Fully Equipped **Tool Trolley**

Serves 4 kids

- ➔ Equipment
- ➔ Safety Gear
- ➔ Workstation tools
- ➔ Working Surface

** Labelled for ease of Use

Equipment

Hot Glue Gun

- 7mm Glue Gun
- Used for majority of creation

Soldering Iron

- Used for building Circuit
- Wire insulated with heat Shrink tube for protection
- Comes with stand

Multimeter

- Used in Electronic-based Innovation Activities

Hand Drill

- Used for many mechanical creations

Other Tools & Equipment

Tester

Used in Electronic-based Innovation Activities

Working Board

Used as the surface for working on

Safety Goggle

Used as a precautionary measure to avoid any injuries

Clipping Plier

Used for cleaning out wires

Desoldering Pump

Used in soldering activities

Wires & Material

Perishable

Circuit Wire

Insulation Tape

Glue Sticks - 7mm

Soldering Wire

Battery

#CE01 Battery Cell - AA	#CE02 Battery Cell - 9V	#CE03 Coin Cell - CR2032

#CE04 Battery Holder - AA	#CE05 Battery Snap - 9V

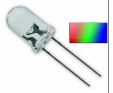
Capacitors

#CE27 Capacitor 100uf	#CE28 Capacitor 10uf	#CE29 Capacitor 1uf	#CE30 Capacitor 4.7uf

IC's

#CE32 UM 66	#CE33 NE 555	#CE34 LM 317

Light & Sound

#CE18 Piezzo Buzzer	#CE19 LDR	#CE20 LED .5W	#CE21 LED RGB
			
#CE22 LED 3mm Color Green	**#CE23 LED 3mm Color Red**	**#CE24 LED 3mm Color Yellow**	**#CE25 LED IR**

Switches

#CE57 Arm	#CE58 DPDT	#CE59 SPDT	#CE60 SPST

#CE61 Push	#CE62 Tilt	#CE63 Reed

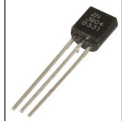
Conductors

#CE06 Wire - Circuit	#CE07 Conductive Tape	#CE08 Jumper Wire FF
#CE09 Jumper Wire FM	**#CE10 Jumper Wire MM**	**#CE11 Prototype Board**

Motors

#CE41 Simple Motor	#CE42 12V Motor	#CE43 Gear Motor	#CE44 Vibration Motor - 3V

Transistors

#CE35 2N2222	#CE36 2N3904	#CE37 BC547	#CE38 D313
			

Resistors

#CE45-56	Available Resistors	
	45 - Preset 100K 46 - Preset 10K 47 - Preset 1K 48 - Resistor 1M 49 - Resistor 100K	50 -Resistor 10K 51 - Resistor 11K 52 - Resistor 100R 53 - Resistor 47K 54 - Resistor 470R 55 - Resistor 330R 56 - Resistor 220R

100's of Electronic COmponents

igniter SPACE

#CR01 Arduino Uno	#CR02 Raspberry Pie	#CR03 PIR Motion Sensor	#CR04 Ultrasonic Sensor

#CR05 IR Sensor	#CR06 Motor Shield	#CR07 9g Servo

Many Different Robotics Components

igniter SPACE

Plastic

#CC01 Balloon	#CC02 Bottle lid Large	#CC03 Bottle Lid Medium	#CC04 Bottle Lid Small
#CC05 CD	**#CC06 Cotton Bud**	**#CC07 Eraser**	**#CC08 Ping Pong Ball**
#CC09 Propeller	**#CC10 Propeller - Nose Hook**	**#CC11 Foam Block**	**#CC12 Rubberband - Large**

Wooden Items

#CC28 Craft Stick - Large	#CC29 Craft Stick - Small	#CC30 Craft Dowel	#CC31 Craft Cube

Miscellaneous

#CC35 Felt Pen	#CC36 File Clip	#CC37 Googly Eye	#CC38 Pipe Cleaner

Paper

#CC22 - 27	Available Papers	
	22 - Cardboard - A4 23 - Cardboard - A5 24 - Hardboard - A6 25 - Cardboard Strip	26 - Paper Cup 27 - Paper Sheet - A3

Many Different Craft Components

igniter SPACE

Pack Storage Rack

- ➔ Space for 32 different Innovation Activities
- ➔ Fitted on lockable wheels for easy transportation
- ➔ Adjustable racks

** Labelled for ease of Use

Component Storage Rack

- ➔ Compartments for Electronics, Robotics, Craft & all other components
- ➔ Electronic Rack Included
- ➔ Wire Reel Rack Included

** Labelled for ease of Use

ASIAN INTERNATIONAL SCHOOL

Colombo 05, Sri-Lanka

MakerSpace for 30 kids

AMERICAN CENTER COLOMBO

US Embassy, Colombo
Sri-Lanka

Pop Up MakerSpace for
30+ kids

AMERICAN CORNER JAFFNA

US Embassy, Colombo
Sri-Lanka

Popup MakerSpace for 30+ kids

IGNITERSPACE NARAHENPITA BRANCH

Narahenpita, Sri-Lanka

MakerSpace for 50 kids

IGNITERSPACE NEGOMBO BRANCH

Negombo, Sri-Lanka

MakerSpace for 40 kids

IGNITERSPACE GAMPAHA BRANCH

Gampaha, Sri-Lanka

MakerSpace for 20 kids

IGNITERSPACE MORATUWA BRANCH

Moratuwa, Sri-Lanka

MakerSpace for 40 kids

IGNITERSPACE KANDY BRANCH

Kandy, Sri-Lanka

MakerSpace for 50 kids

Core TEAM

Co-Founder

Hasith Yaggahavita

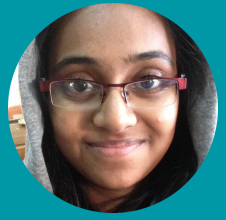
Co-Founder & CEO

Jehan Wijesinghe

Co-Founder & COO

Subhashini Wijewardhana

Full-time Team



Research & Development

Business Development

Operations

Branch Management

30+ Parttime Facilitators

Sunday has become the favourite day of the week since for them, since they joined IGNITER SPACE

- Dilshan Fernando

Absolutely wonderful class! I can't think of anything better for my son to do on a Saturday at 12.30. He loves it and is so excited to bring home his creations.

- Sanjee Wanniatchi

The only class my son is all dressed and ready to go, half and hour early!!!

- Neelangie Nanayakkara

IgniterSpace is unique. Their innovative ways of Teaching, friendliness of all staff, inspirational coaching and mentoring, as well as clean and modern facility provide the perfect environment for learning. I would highly recommend IgniterSpace for all the parents who are looking for a place that inspire kids to do more with the technology than what they usually do.

- Dr. Madhu Fernando

OUR ACHIEVEMENTS

Aavishkaar
Impact Award
2017

1st Runner up
Venture Engine
2017

Winner
E-Swabhimani
Education & Learning Category
2017

igniter
SPACE
Thank You!