



REIMAGINE K-12 EDUCATION

Addressing gaps in the current school system

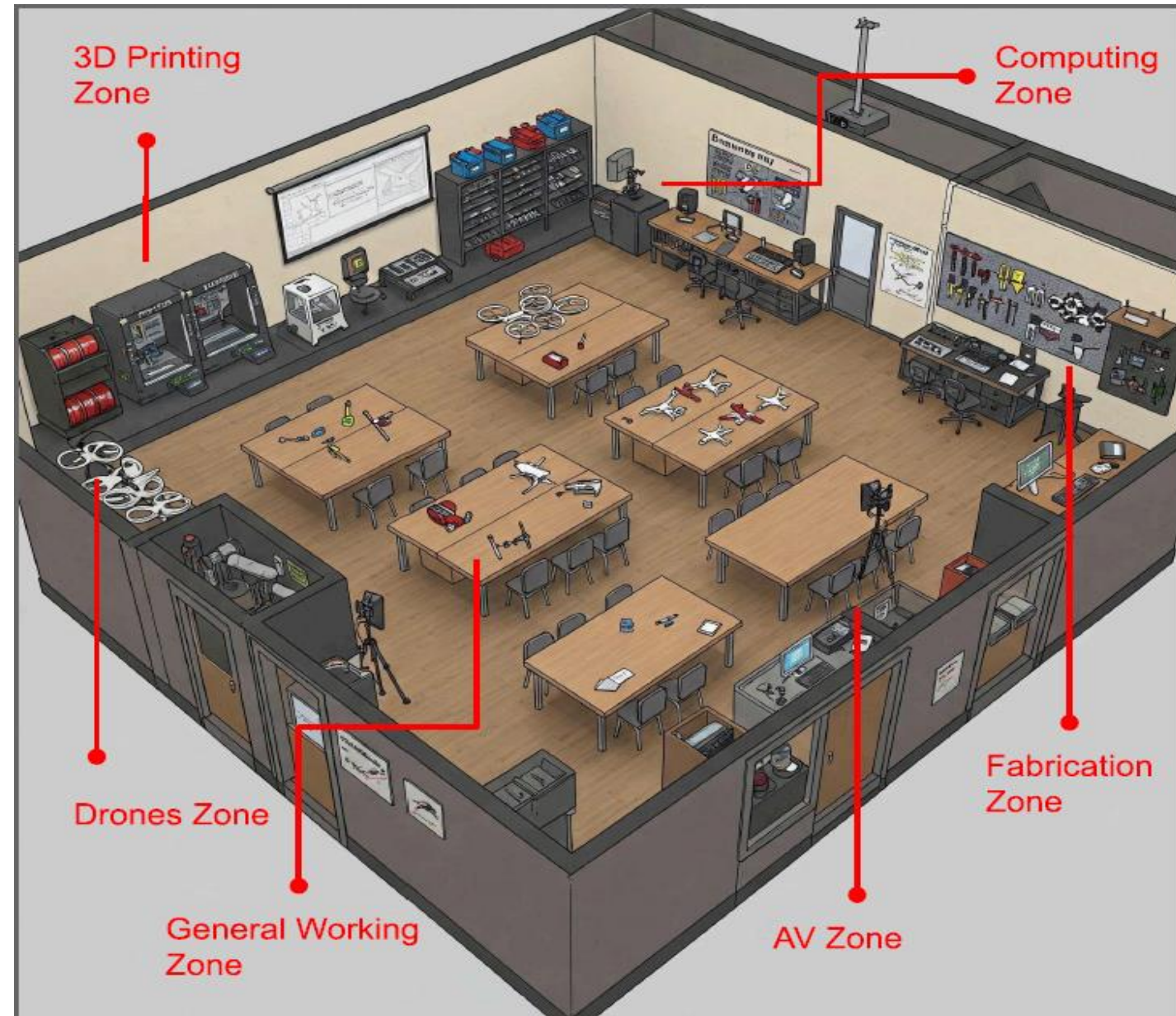


A Model look of the Composite Skill Lab

- ✓ Lab Size : 1200 sq ft equipped with basic setup and internet connectivity
- ✓ Schedule : 2 slots per week

Benefits

- ✓ Experiential Learning
- ✓ AR VR setup
- ✓ Learners are free to tinker
- ✓ Promotes taking self initiative - Guided path for project on their own



Tools and Technologies



MIT App Inventor



TinkerCAD



Python



Micro:Bit



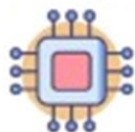
Teachable Machines



Canva



MakeCode



Electronic



Arduino



Makey Makey



3D Printing



Javascript



ML for Kids



Robotics



Kaggle



Jupyter

Beginner (Grade 6-7)
Basic to Advanced Tech
Tools



MIT App Inventor



TinkerCAD



Python



Fusion 360



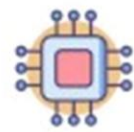
Teachable Machines



Canva



Figma



Electronic



Arduino



Google AR Core



Blynk



Adobe Illustrator



Javascript



ML for Kids



ESP32 IoT



Kaggle



Jupyter

Advanced (Grade 8-12)
Advanced Tech Tools

Grade Wise Projects and Tools/ Skills Attained

Grade 6

- Project 1: Portable Green House
- Project 2: Home Security System
- Project 3: Physical Activity Track

Skills: Micro Bit, Pulse Sensor, Microsoft Make Code, Accelerometer, Energy, Calories, Programming, Variables, Conditionals, Heart health

Grade 7

- Project 1: Animal Prosthetics
- Project 2: Maker Arm
- Project 3: Oil Spill Cleaner

Skills: Micro bit, Motors, MS Make Code, Algorithm, Density, Absorption, Surface area, EV, Circuits, Motors, Voltage Control, Devices, Man-made environmental hazards.

Grade 8

- Project 1: Rockets
- Project 2: Photobooth 360
- Project 3: Smart Waste Segregate

Skills: Micro bit, servo motor, levers, frugal prototyping, Circuits, Relays, Electromagnets, Ferrous and Non-Ferrous Metals, Variables, Conditionals, Angles, Voltage control

Grade 9

- Project 1: Bio Bots
- Project 2: Light Sensitive Device
- Project 3: Recyclable

Skills: MIT App inventor, Image Classification, ML Model Evaluation, Data Type Structures, UI & UX, RGB Color Coding, Image Classification, Recycling, Natural Resources, Reduce-Reuse-Recycle

Grade 10

- Project 1: School Bus Tracker
- Project 2: Mood Light
- Project 3: Wheels on AI

Skills: Arduino, Motors & Drivers, Circuits, Programming, Farming processes & techniques, Variables, Data Types, Functions, Speed-Distance Time, Analog, Digital Signals, Mechanical Systems, PWM Signal

Grade 11

- Project 1: AR Explain
- Project 2: Mobile Device Detector
- Project 3: Remote Health Monitor

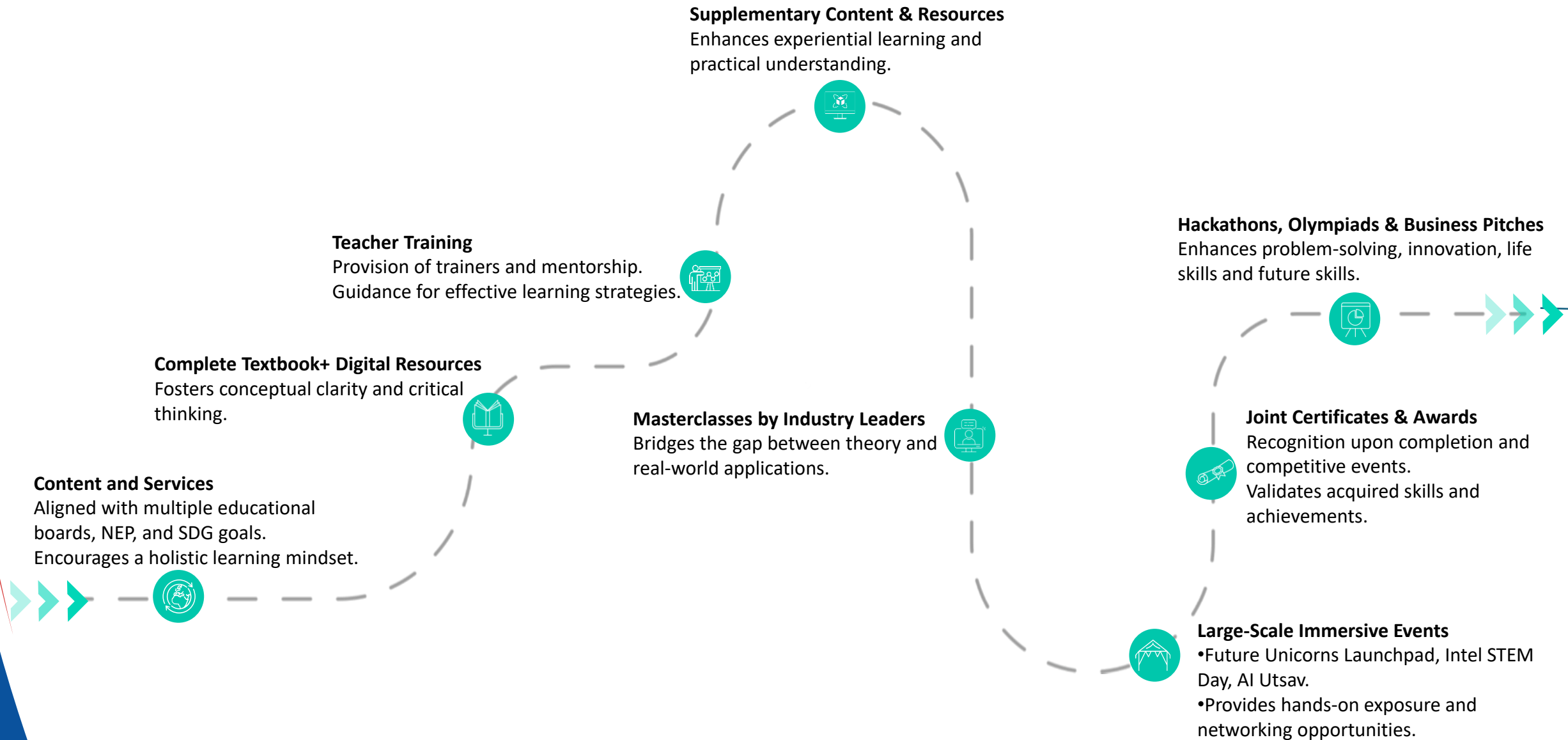
Skills: ESP32 Development Board, Arduino IDE, Blynk, Pulse Oximeter, Temperature Sensor, Data Analysis, Microcontroller, Circuit, Sensors, Variables, Temperature, Pulse rate, IoT Cloud

Grade 12

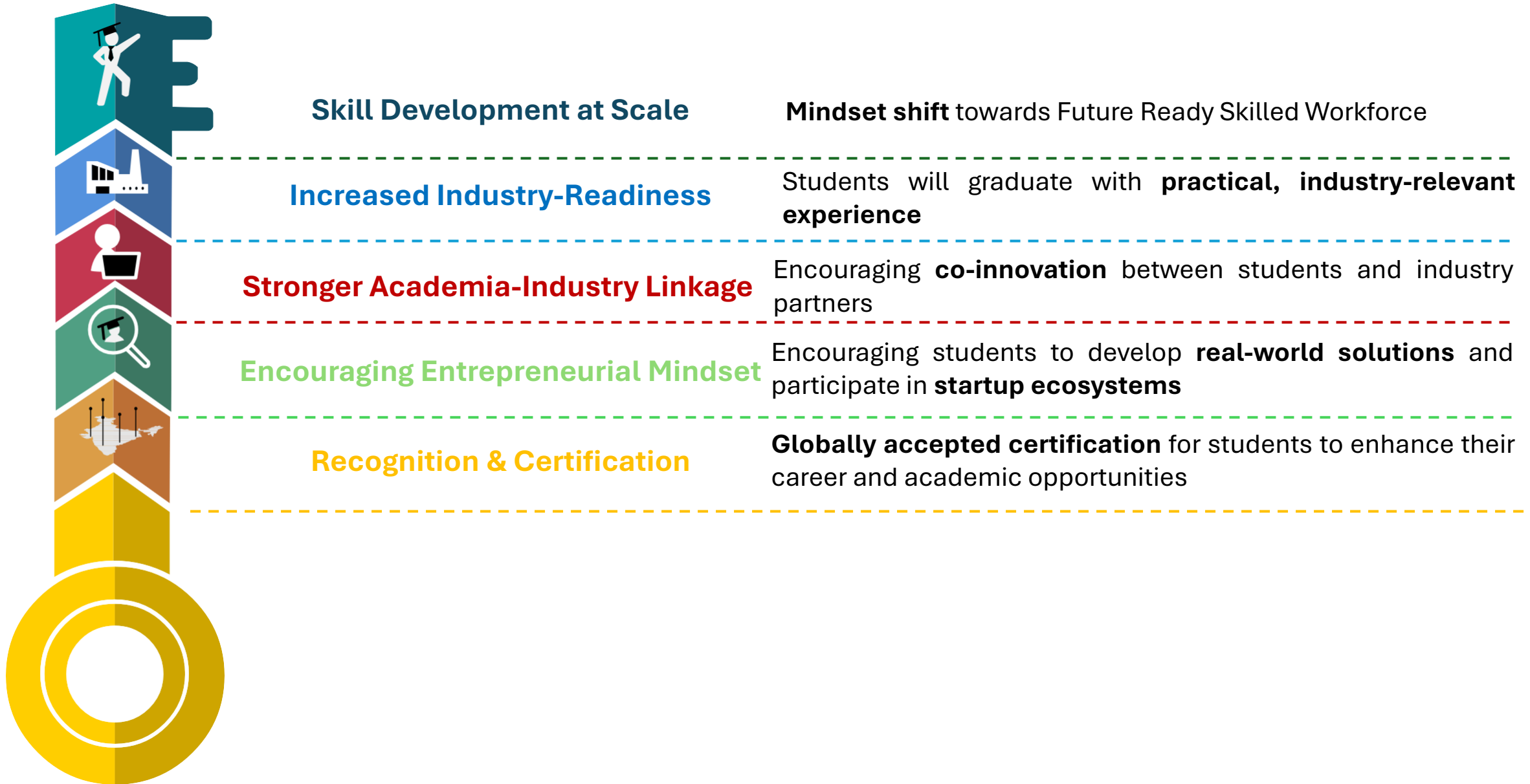
- Project 1: X-Ray Logistics
- Project 2: Wildlife Alert
- Project 3: Smart Switch

Skills: Blynk, ESP32 Board, Relay Module, Arduino IDE, Microcontroller, Motors, Internet of Things, Circuit, Sensors, Conditionals, Programming, Relays, Circuit Control, Electrical Power, IoT Cloud

How the Journey of each learner will look like



Expected Outcomes & Impact





Thank You