HOUSE SELECT COMMITTEE ON ADVANCING WOMEN IN STEM

October 12th 2022

***Rafi Vaca-Tricerri**, Lead STEM Instructor*
***Sean Newman Maroni**, Founder & CEO*
***Greg Pearlman**, CSO*

PART 1:

Betabox NC Pilot Overview

Speaker: Sean Newman Maroni

Founder & CEO, Betabox Learning

Contact: sean@betaboxlearning.com

About Betabox Learning

We’re a small team with a big mission to **spark and sustain hands-on learning in K12 schools**. Since 2016 we’ve been focused on addressing STEM resource and instructional equity gaps in rural and low-income schools in the southeast.

Betabox NC Pilot

- Multistep district implementation designed to increase hands-on technology instruction in 100 rural and low-income NC schools in 30 districts.
- Aligned with computer science, engineering, and associated technology careers.
- 12,000 students and 500+ teachers will participate in the pilot.

The Learning Labs

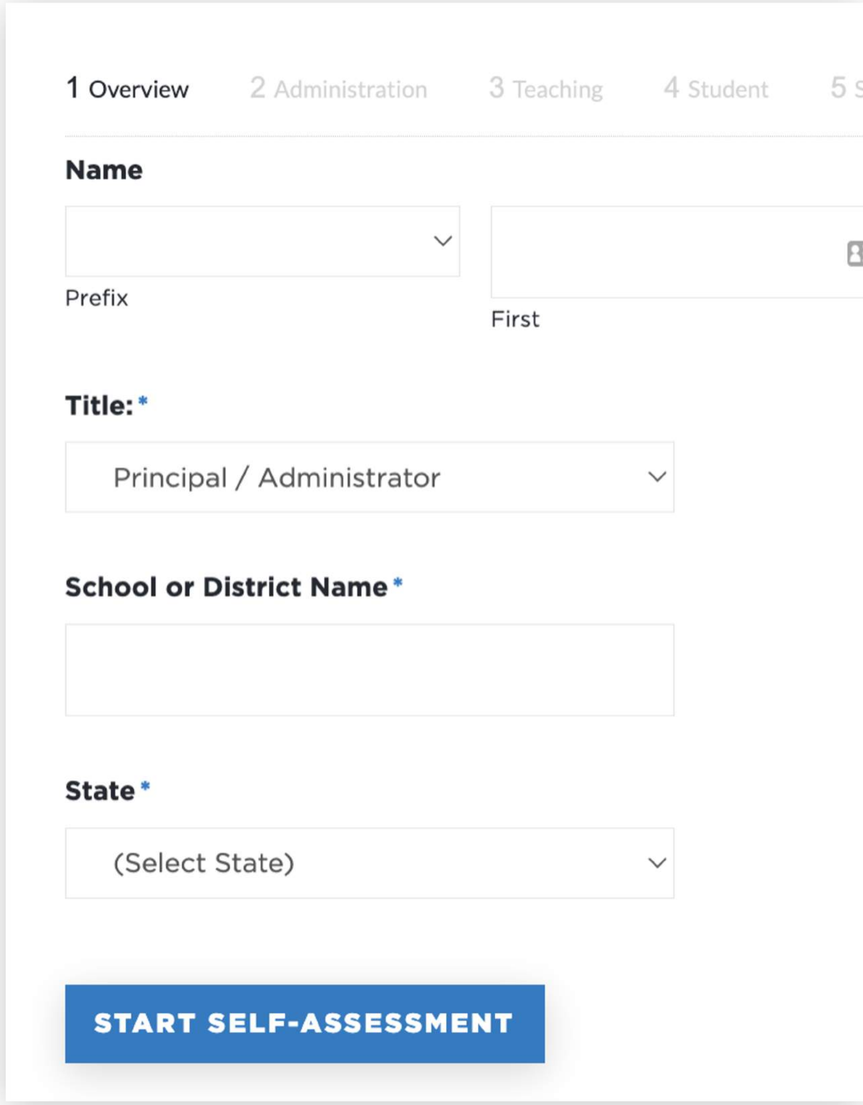
Our fleet of mobile learning labs are designed to create an innovative, inviting, and open space for students to feel comfortable while exploring technology.

We bring our own power, HVAC, internet, equipment, and staff to any school across the state.

Phase 1: Gap Identification

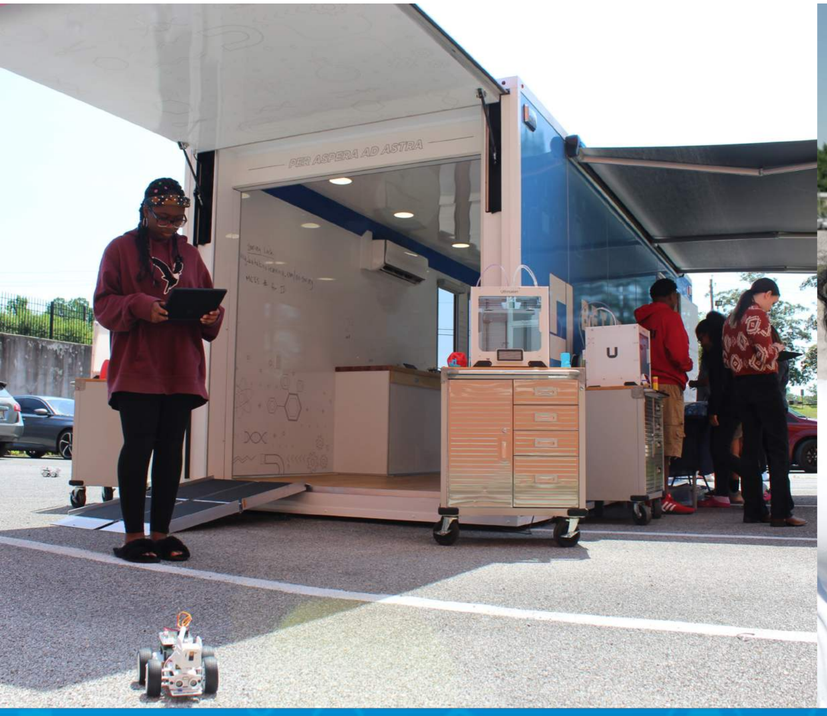
- Assess existing gaps in STEM resources at school
- Tailor program services to address gaps when possible
- Schedule Onsite Field Trip

***Goal**: Build trust with administration and foster top-down support.*



Phase 2: Spark Student Interest

High-energy hands-on technology experiences in any school parking lot.



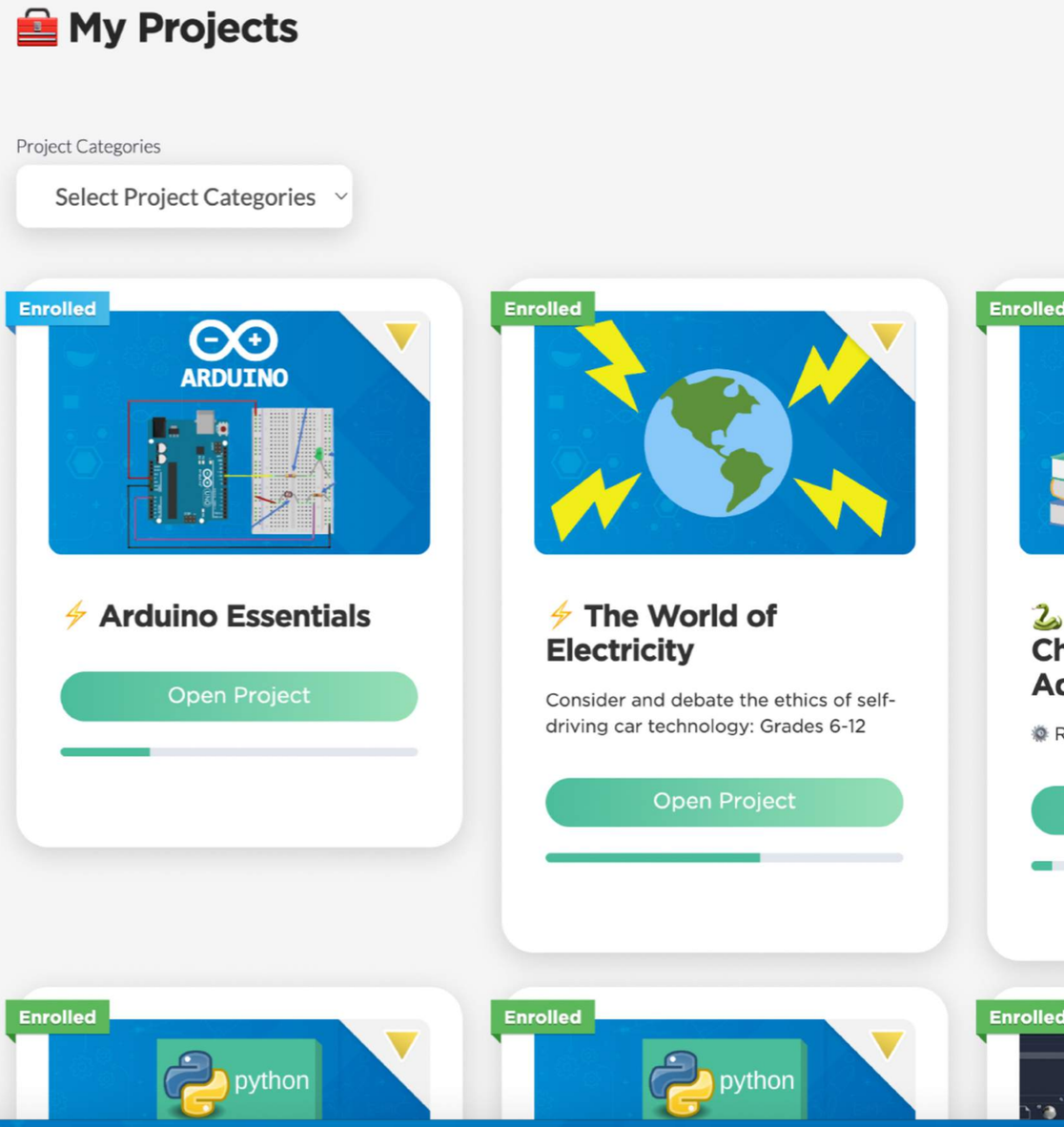

What does a
Betabox Learning
Onsite Field Trip
look like?
https://vimeo.com/betaboxlearning/osft

Phase 3: Support Teachers

All teachers that observe the Onsite Field Trip gain access to our Classbox Portal.

Features:

- Standards aligned hands-on lessons
- Professional development webinars
- Equipment checkout program
- 1:1 instructional and technical coaching



Program Status (10/12/22)

Program Enrollment Status			
Program Target	**Target Value**	**Current Value**	**% Of Target**
Eligible Schools Applied	100	121	121%
Schools Enrolled	100	17	17%
Field Trips Scheduled	150	44	29%
Field Trips Completed	150	17	11.3%
Student Participants	12,000	1,144	9.5%

Program Participation Demographics	
	Percentage
Female Students	51.5%
Students of Color	46.2%

Betabox NC Pilot Program Timeline			
Program Phase	**Timeline**	**Description**	**Current Status**
Activation	March - May 2022	Construction of three (3) Betabox learning labs, program marketing, staffing, curriculum, training.	**Completed**
Operations Phase 1	June – December 2022	School enrollment, Operations. Plan to complete 25% of Onsite Field Trips.	**On Track**
NCDPI Interim Report Due	October 1, 2022		**Completed**
Operations Phase 2	January - December 2023	Target to complete remaining onsite field trip engagements.	Upcoming
NCDPI Annual Report Due	October 1, 2023		Upcoming
NCDPI Annual Report Due / Program End	October 1, 2024		Upcoming

The Numbers

- **Student Impact**
  - +89% STEM Interest & Awareness
  - +80% Content Knowledge
  - +82% Belonging in STEM
- **Teacher Impact**
  - 70% report increased interest in adding more hands-on learning

Betabox Experiences - Summary Of Data			
	Increased Interest & Awareness	Improved STEM Content Knowledge	Socioemotional Belonging
Positive Change	89.7%	88.9%	92.5%
Neutral / No Change	4.7%	9.3%	6.4%
Negative Change	4.9%	1.8%	1.1%

Arduino Essentials - Summary Of Data			
	Increased Interest & Awareness	Improved STEM Content Knowledge	Socioemotional Belonging
Strongly Agree %	57.3%	63.5%	68.9%
Agree %	36.2%	27.0%	28.4%
Disagree %	5.4%	8.1%	2.7%
Strongly Disagree %	1.1%	1.4%	0.0%

Self-Driving Cars - Summary Of Data			
	Increased Interest & Awareness	Improved STEM Content Knowledge	Socioemotional Belonging
Strongly Agree %	49.5%	47.3%	47.7%
Agree %	36.4%	40.0%	40.0%
Disagree or Neutral %	4.0%	10.5%	10.0%
Strongly Disagree %	8.7%	2.3%	2.3%

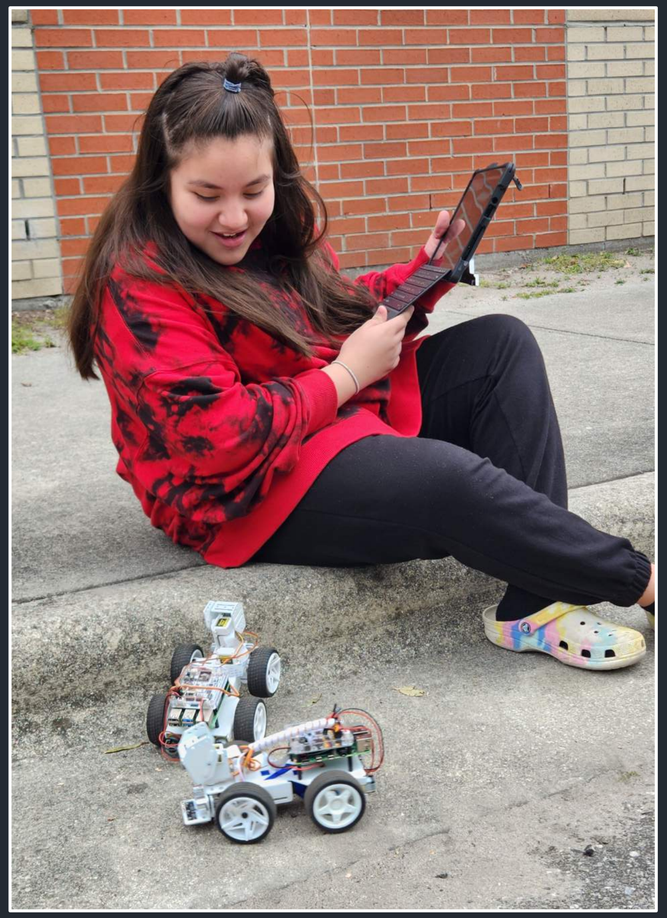
PART 2:

Guiding Young Women into STEM

Speaker: Rafi Vaca-Tricerri

Lead STEM Instructor, Betabox Learning

Contact: rafi@betaboxlearning.com

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QUESTIONS?

THANK YOU!

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