FLORIDA FLATE® ADVANCED TECHNOLOGICAL EDUCATION CENTER

part of the FloridaMakes® network

Educator Webinar Series: *Tools & Tips for Virtual STEM Summer Camps*

January 21, 2021
4:00-4:30 pm

Educator Webinar Series:
Tools & Tips for Virtual STEM Summer Camps

Agenda

- Introductions
- Online resources
- Tools for summer camps
- Online platforms & technology
- Q & A

Who we are

Dr. Marilyn Barger
Director

Danielly Orozco-Cole
Program Manager
Career and Technical Education

Florida Advanced Technological Education Center

Guest Speaker

Desh Bagley

Director - IT/Coding Academy, State College of Florida

Founder – TechPlayzone

Who we are

Florida Advanced Technological Education Center

Strengthening Career & Technical Education for the 21st Century Perkins V Act, State Leadership

VISION

FLATE will drive Florida's World-class Manufacturing Workforce Education

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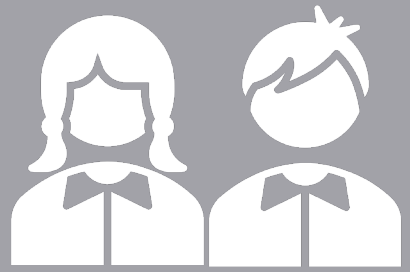
FLATE'S Work

Curriculum Reform and Development

Educator Professional Development



Outreach and Student Recruitment

Impact locally. Lead nationally.

Welcome

Tools & Tips for FUN Virtual Camps

Camp Planning and Preparations

Determine the following
- Topics, budget
- Platforms
- Staff and volunteers

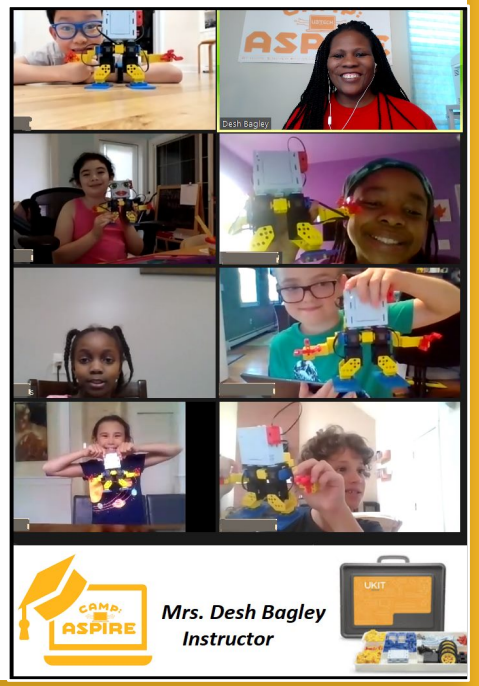
Communication
- System and software requirements
- Equipment requirements
- Train staff and volunteers

Marketing and Media
- Flyers and social media
- Press releases

Collaboration and Celebration
- Online tools to share projects
- Share videos and pictures
- Invite sponsors to hear presentations

Camp Topics

Robotics, Game Design, Minecraft, Coding, Electronics, 3D Design

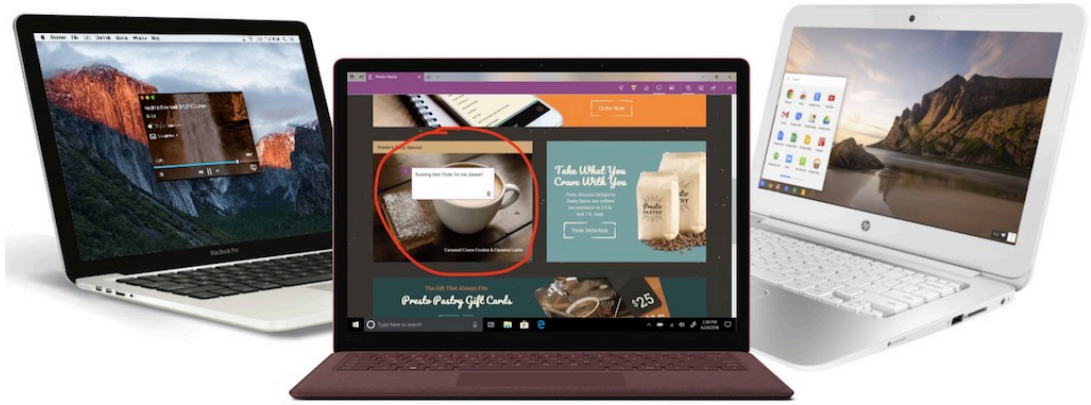


Camp Platforms

Meetings

Online Meeting Platforms

Technology



Laptops, MacBooks, Chromebooks

Online Resources

FIRST @ Home

https://www.firstinspires.org/community/home-learning

FIRST

FIRST EDUCATION

Bring learning to life with free and flexible PreK-12 STEM activities from *FIRST*®

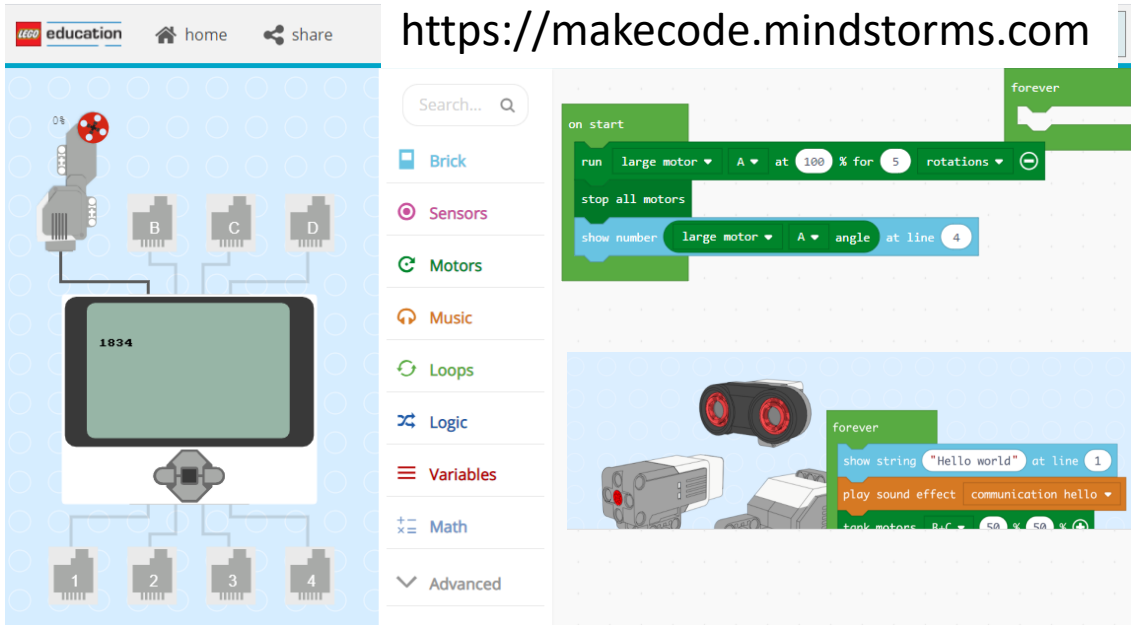
— Coding, Programming, and Artificial Intelligence

Want to learn a new coding language, brush up on your programming skills or take it to the next level and dive into machine learning? These resources will help you develop computer science, coding and programming related skills.

- Beginner/Intermediate - **Scratch** - a block-based visual programming language similar to Spike Prime and *FIRST* Tech Challenge languages - Code interactive stories, animations, and games.
- Beginner/Intermediate - **Hour of Code** - a variety of tutorials in Python, Java, JavaScript, C++, Block Based.
- Beginning to Advanced - **AWS Educate** is Amazon's global initiative to provide students comprehensive resources for building skills in the cloud. It is a no-cost curriculum providing access to content, training, pathways, and AWS services. These two activities are a great way to start students the cloud-related learning content and resources on subjects from storage to machine learning.
- Intermediate – **Programming Electronics Academy –** Arduino programming course and resource guides
- Intermediate/Advanced - **Machine learning Projects** – Explore innovative topics and do projects or hands on challenges.
- Intermediate/Advanced - **AP Computer Science A in Java**
- Intermediate/Advanced – **Teachable Machine** – Train a computer to recognize your own images, sounds and poses. Great activities to do at home to practice generating machine learning software from collaboration with our friends at Google.
- Beginner/Intermediate - Our strategic partners at **Qualcomm® Thinkabit Lab™** are Inspiring the next generation of inventors by showing students that they can be part of inventing the wireless world of the future.
- Meet Ashley and Abakir, two #AmazonFutureEngineer Scholarship winners and *#FIRST* alumni, as they introduce this year's **Amazon Cyber Robotics Challenge**! Learn to code and complete the challenge this fall for a chance to win $250 for your team. Learn more: AmazonFutureEngineer.com/CyberRobotics
- Middle School - 2 Part (90 minute activity) - Make a **chat bot** with Amazon Lex.
- High School - 3 Part (120 minute activity) - **Artificial intelligence** using cloud computing.

Virtual Robotics

https://vr.vex.com/



https://makecode.mindstorms.com

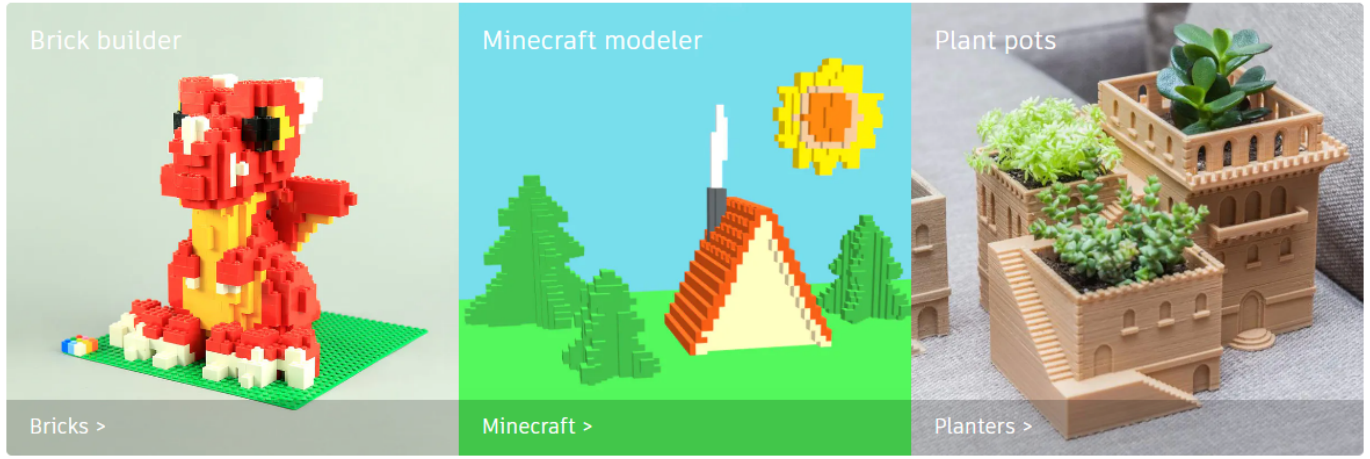
CoderZ™

https://gocoderz.com/

TinkerCad

Tinkercad does:

https://tinkercad.com



PrintLAB – Online Tutorials for Tinkercad

https://classroom.weareprintlab.com/

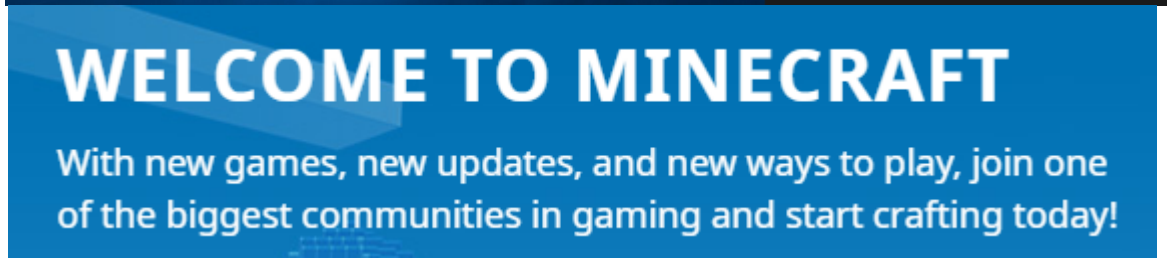
Designing in Tinkercad for 3D Printing

MCEdit: World Editor for Minecraft

MCEdit is a saved game editor for Minecraft. Since Minecraft saved games contain every single element of the world the player is playing in, it has much more in common with 3D world, map, and terrain editors than traditional saved game editors. MCEdit has been developed since 2010 with the original goal of allowing Classic levels to be played in the full version of Minecraft, but has since evolved into a full featured editor and is currently undergoing a thorough rewrite for version 2.0.

Minecraft

http://minecraft.net



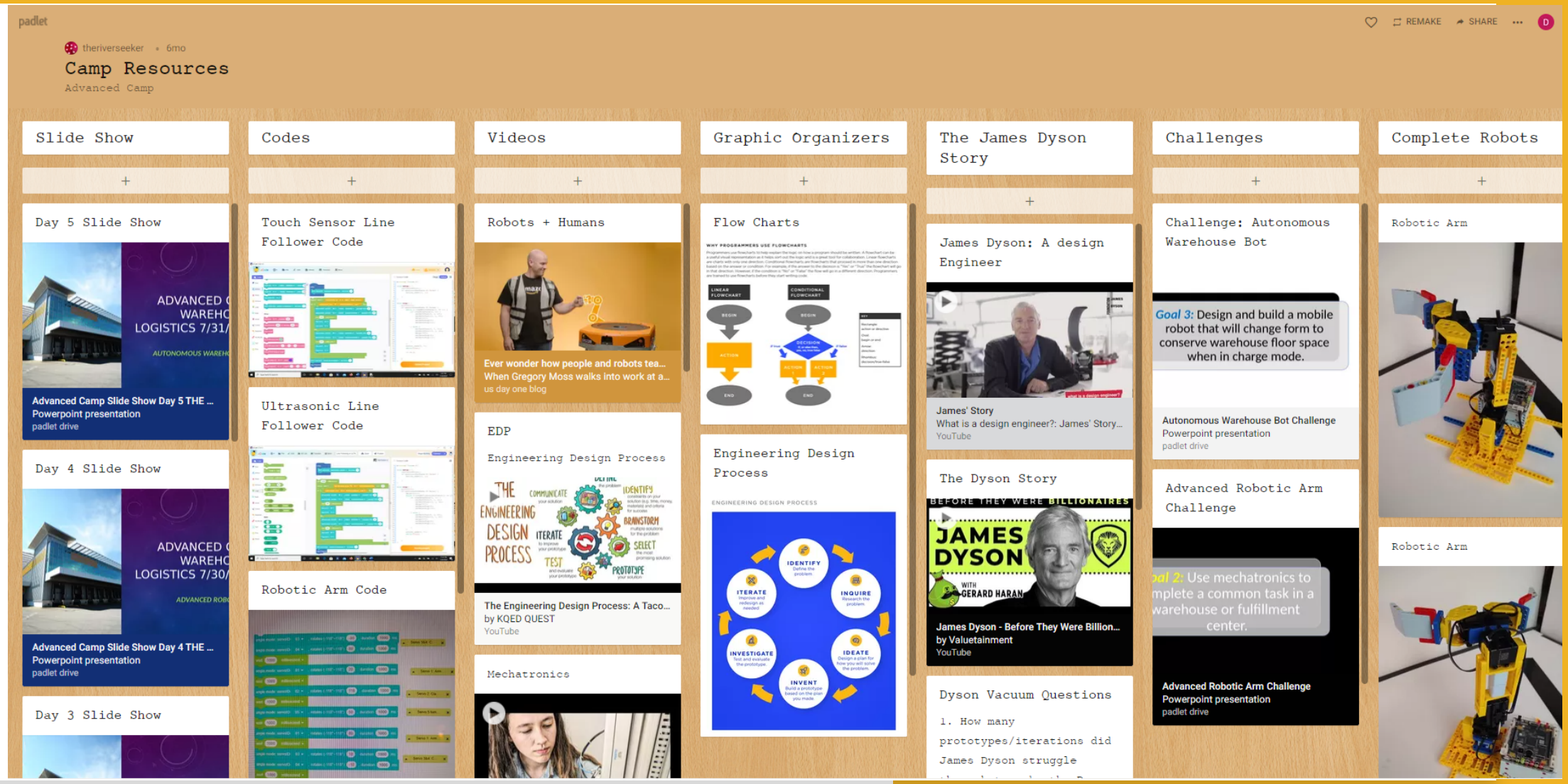
Be aware:

- Use the Computer - Java Edition Minecraft
- Laptops with enough memory for both Minecraft and remote meeting software

UBTECH EDUCATION

Hybrid Camps

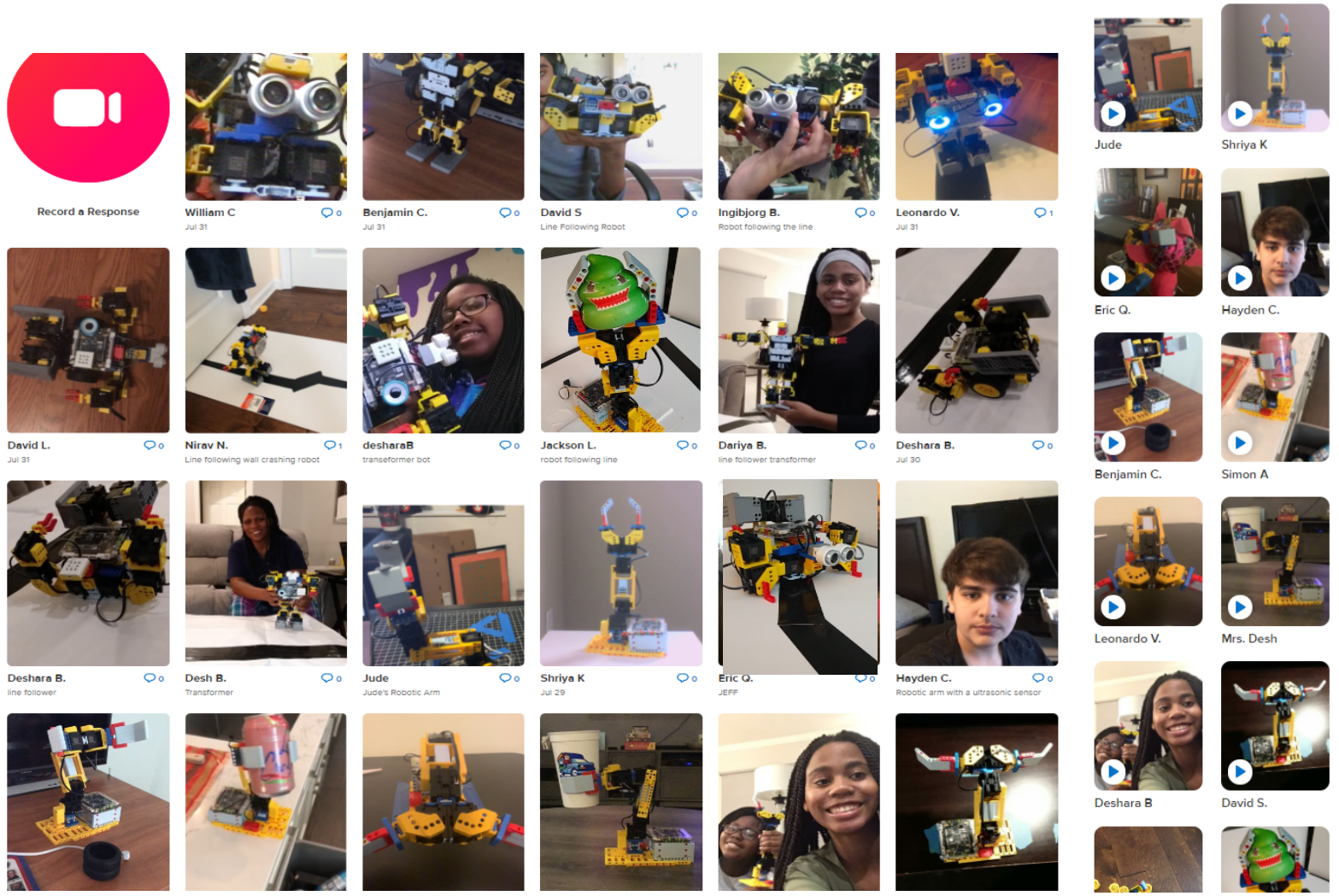
Collaboration Tools



https://padlet.com/theriverseeker/melm6ma4zhkyubxa

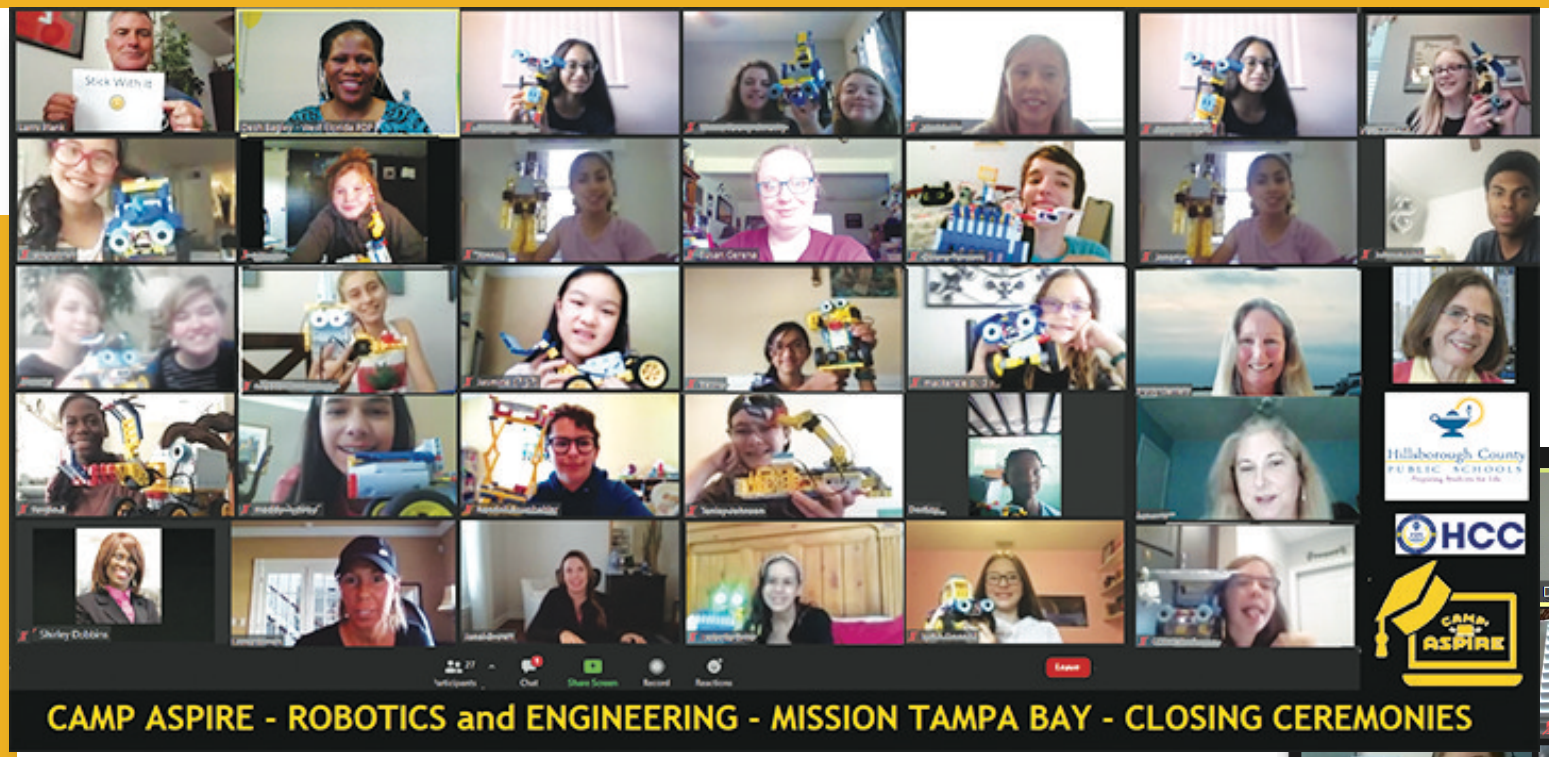
Collaboration Tools

Flipgrid



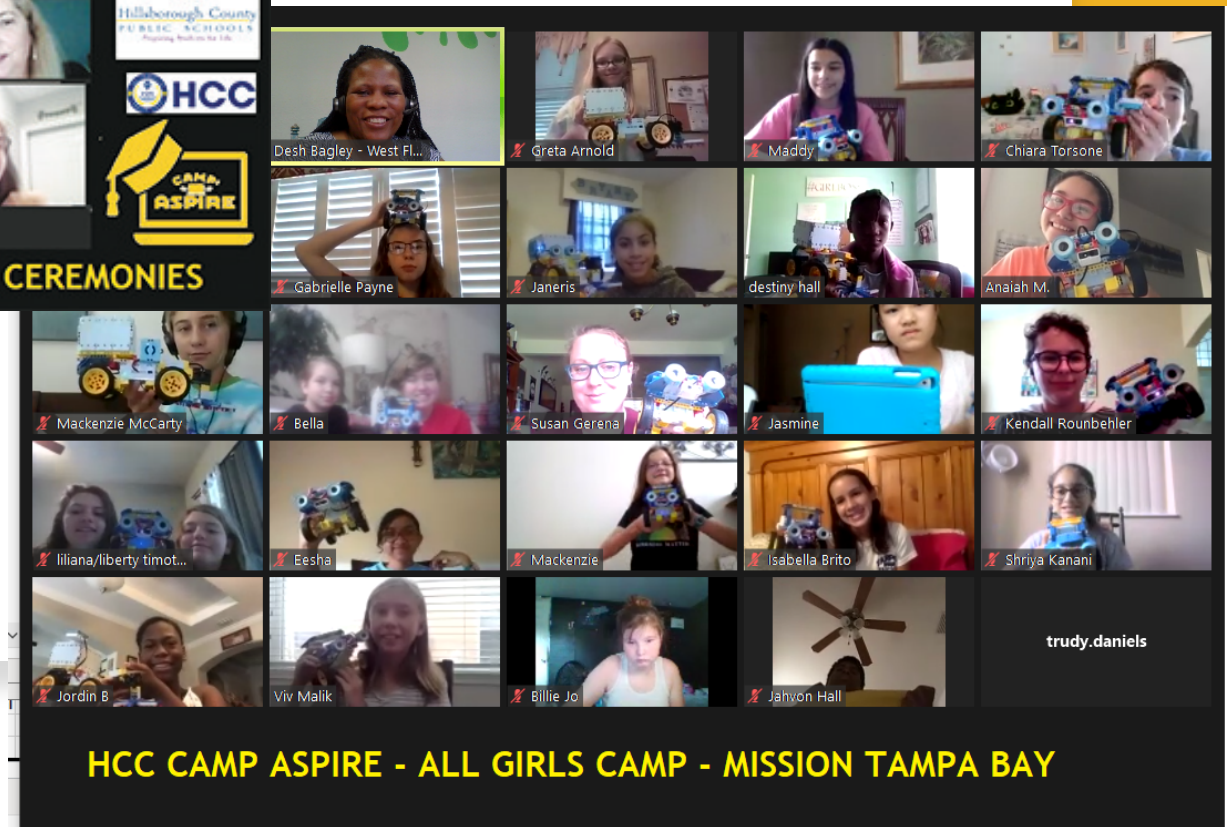
https://flipgrid.com/6e93a673

Camp Celebration

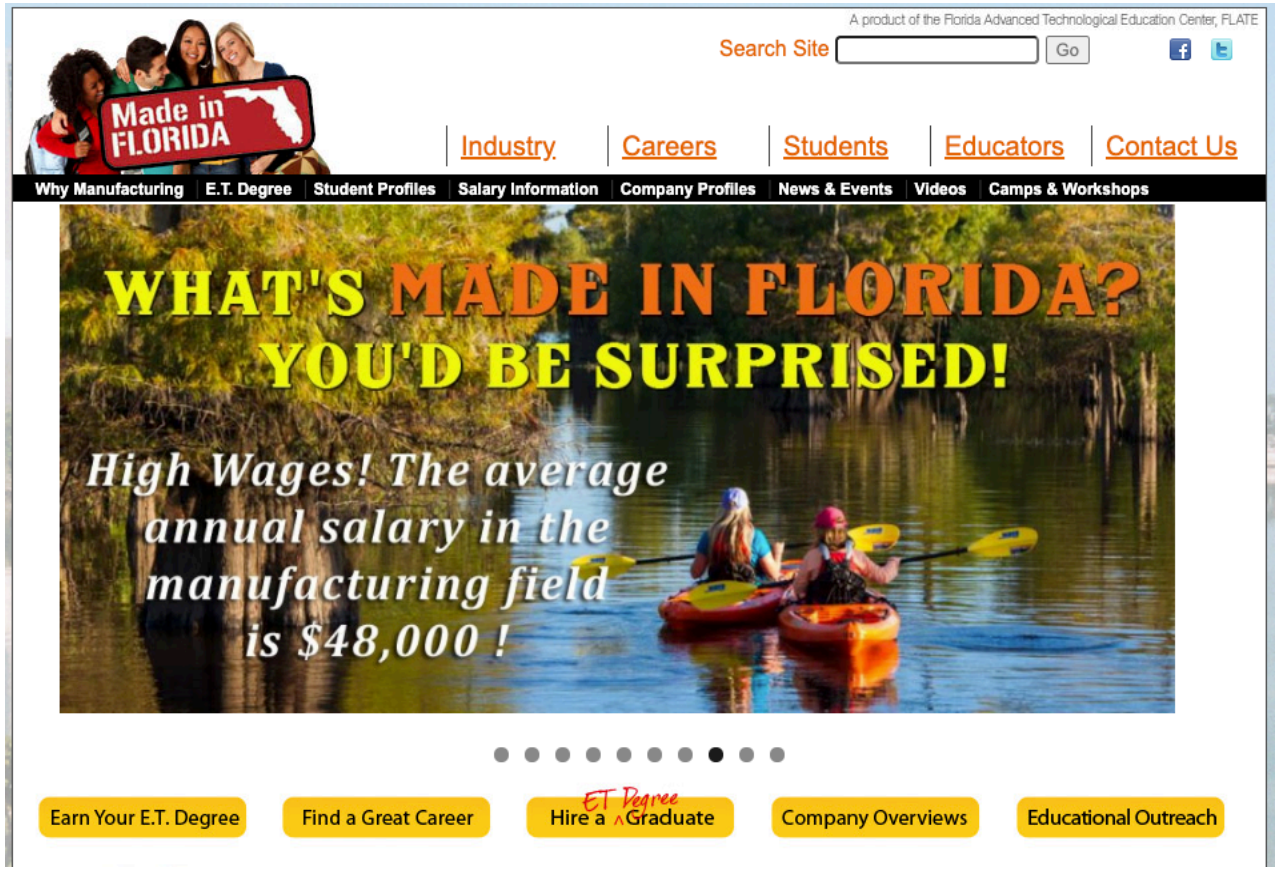


- Campers give presentations
- Celebrate accomplishments
- Invite sponsors to hear the campers

- Get photo release forms signed by guardians
- Take lots of screenshots
- Share those with media, parents, and sponsors



Made in Florida Resources



http://madeinflorida.org/

www.flate.pbwiki.com

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JOIN US

FLATE Ed. Webinar Series:

Tools & Tips for Funding Tech Summer Programs

Thursday, February 18th , 4:00 – 4:30 pm

Visit FloridadaMakes/Events or Register Here

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Questions?

Thank You!

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IT/Coding Academy Director

Presentation and link to the recording available at **www.flate.pbwiki.com**