

Skills21 at EdAdvance

Summer 2021



Program Setting and History

For 20 years, the Skills21 program at EdAdvance has featured a rich combination of challenge-based learning, professional development, experiential learning events, and Student Expo which together improve:

- Academic Gains
- 21st Century Skill Mastery
- STEM College and Career Attitudes
- Ability to Work With Students from Different Backgrounds



Challenge Categories

- Advanced Manufacturing
- Capstone
- Computer Science
- Engineering
- Entrepreneurship
- Health
- Middle School
- New Media
- NGSS
- Technology



Engineering Challenge

What is the Engineering Challenge?

Students who compete in The Engineering Challenge are expected to identify a problem in which they develop an innovative solution. This solution must be approached with a strong engineering focus. The project must incorporate the theme of *Breaking Boundaries*. All projects will be showcased at Skills21's Expo Fest on Saturday, June 6th 2020 at the Oakdale Theatre in Wallingford, CT.

What are the expectations for the Engineering Challenge?

- *Project Idea* contains the 2020 theme, is considered viable, creative and proves to be unique from its competitors.
- *Research & Development* is documented including focus groups, surveys, test audiences, primary research as well as design and prototyping.
- *Computational Thinking* is used to analyze and interpret data as well as providing visual data and a project value document.
- *Written Documentation* and White Paper are free of grammatical errors and articulate the project's goal.
- *Marketing* is used to create compelling messaging and visuals for the project in all media including social media and website.
- *Project Booth* creates an engaging environment for the project and helps visitors interact with the project and the team.
- *Project Presentation* is well rehearsed and contains visual aids. Presentation must be 3-5 minutes in length.
- All aspects of the project are documented on the Launchpad Profile due by May 25th- including a project trailer.



Helpful Links:

- [Scoring Criteria](#)
- [Booth Guidelines](#)
- [Booth Example](#)
- [Project Value \(template\)](#)
- [Launchpad](#)
- [Pitch Example](#)

Important Dates:

- Launchpad Names and Project Name Deadline: February 7th, 2020
- Launchpad Final Deadline: May 25th, 2020

Questions?

- Please contact Gary Robinson (robinson@edadvance.org).

Current Program Areas

- Personal Interest Projects
- Capstone / Mastery-Based Diploma Assessment
- Lt. Governor's Computing Challenge
- NSF ARX21 - STEM & Augmented Reality
- NSF Advanced Manufacturing
 - skills21.org/manufacturing-challenge



2020-2021 Examples of Student Work



A screenshot of a web browser displaying the Skills21 website. The browser's address bar shows "skills21.org/expofest". The website has a navigation menu with links for "PERSONAL INTEREST PROJECT (PIP)", "CAPSTONE", "JOURNEY OF YOU (JOY)", "WORKSPACE CT", "2021 EXPO FEST", and a "CONTACT" button. Below the navigation, there is a pink "Expo 2020" tag. The main heading reads "2021 Expo Fest Video Content". Underneath, there is a pink sub-heading "2021 Expo Fest Intro". A video player is embedded, showing a thumbnail for "2021 Expo Fest Intro" with the text "Reimagine 2021 expo FEST" and "Student Trailer Intro". The video player includes "Watch later" and "Share" icons. At the bottom right of the page, there is a "Let's Chat" button.



PERSONAL INTEREST PROJECT (PIP)

CAPSTONE

JOURNEY OF YOU (JOY)

WORKSPACE CT

2021 EXPO FEST

CONTACT

Expo 2020

2021 Expo Fest Video Content

2021 Expo Fest Intro

2021 Expo Fest Intro

Watch later Share

Reimagine
2021 expo FEST

Student Trailer Intro

Watch on YouTube

Let's Chat!

2021 Expo Fest Awards

Films

Overall

Best Picture

[Hidden Treasure](#) - ESUMS

Best Editing

[Night Maverick Stands Up](#) - Woodland Regional High

Best Acting

[Mr. Hollywood](#) - Wethersfield High

Best Cinematography

[Undercover Freddy](#) - Woodland Regional High

Best Screenplay

[Lockbox](#) - Wethersfield High

84 Hour Challenge

First Place

[Undercover Freddy](#) - Woodland Regional High

Second Place

[Reunion](#) - ESUMS

Third Place

Book Trailer Challenge

First Place

[The Dreaming Tree](#) - Newington High

Second Place

[Hatchet](#) - Newington High

Third Place

[Wonder](#) - ESUMS

Documentary Challenge

First Place

[Hidden Treasure](#) - ESUMS

Second Place

[Reimagining Prisons](#) - ESUMS

Third Place

[Reimagining The Classroom](#) - Timothy Edwards Middle

Editors Challenge

First Place

[WAL](#) - Woodland Regional

How To Challenge

Middle School Challenge

First Place

[The Day It Rained](#) - Shepaug Valley Middle

Second Place

[A Broken Dream](#) - Shepaug Valley Middle

Third Place

[The Great Eggscape](#) - Shepaug Valley Middle

Open Challenge

First Place

[In The Dark](#) - Timothy Edwards Middle

Second Place

[Mr. Hollywood](#) - Wethersfield High

Third Place

[Lockbox](#) - Wethersfield High

PSA Challenge

First Place

[Night Maverick Stands Up](#) -

Capstone

Overall Humanities, Arts and Social Justice

First Place: [Academia Lost](#) - Christopher Nivers - Pomperaug

Second Place: [Modern Mixing](#) - Brynn Paccione - Pomperaug High

Third Place: [STEM for BIPOC & Women](#) - Adira Ahmad Rizal - Hill Regional Career High

Outstanding STEM

First Place: [Memento](#) - Liam Delaney - Pomperaug High

Second Place: [DomeFlow](#) - Shivaun Mathews - Pomperaug High

Third Place: [Tether Spaceways](#) - Cole Stevens - Pomperaug High

Teams

Computer Science Challenge

First Place: [Byte Sized Cookies](#) - Newtown High

Second Place: [Simple Thought](#) - Kaynor Technical High

Excellence in Engineering

Middle School Challenge

First Place: [Sharp Focus](#) - Thomas Edison Middle

Second Place: [Hacks4You](#) - Thomas Edison Middle

NGSS Challenge

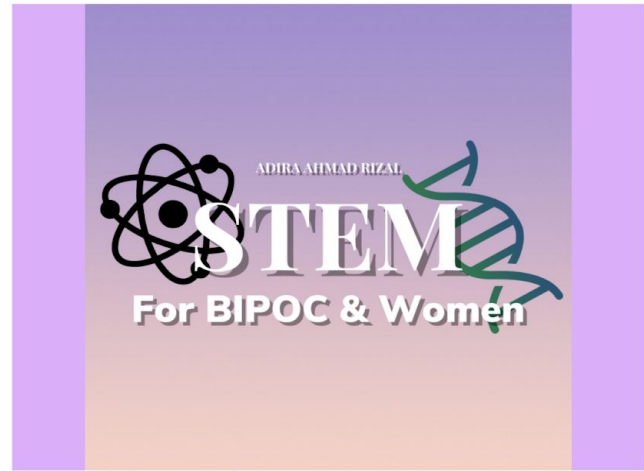
Technology Challenge

First Place: [Stylo](#) - Wamogo Regional High

Second Place: [SwiftStep](#) - Wamogo Regional High

STEM for BIPOC & Women

- ABOUT
- PROJECT IDEA
- PROJECT DEVELOPMENT
- PROJECT PROCESS
- WRITTEN DOCUMENTATION
- RESEARCH AND DATA
- POSTS



The Problem

The Solution

About Me

The Problem

The lack of inclusivity and accessibility for BIPOC and women in STEM drives them away from doing work in science. This is caused by the unwelcoming environments that predominantly white institutions create that do not allow diversity to thrive. It leaves the responsibility of sustaining inclusion to BIPOC and women when the problem is that white people do not welcome them into these spaces. The lack of diversity among the STEM field harms people of color and women and discourages them from entering and studying science, a developing field that is requesting more people to join because of the advancement of technology and research. Many institutions claim diversity by raking in numbers of minorities, however, they often leave when the spaces do not cater to them because the unwelcoming nature and lack of resources drives them away from pursuing a STEM career.

Post



My project is called Good news with Gracie. I am making a talk show were I share good news stories from around the world. I am also going interview a front line worker or someone who has helped spread good news in the community. By the end of this project, I hope to have a series of episodes tracking the stories I've shared and people I've interviewed. I think I chose this project because it helps other people besides myself. Sharing kindness and good, always make people happy. I want my project to inspire and change mindsets of people around me. Yeah, right now we are all dealing with a lot. Some of us and locked inside having to quarantine, others are in the hospital



May 3, 2021

Monday, May 03, 2021

Artifact : Post

To organize all my episode I will be putt them into a google site. The site will be linked at the top of my launchpad. For each episode I will be explaining who, and what are in each one. Creating a google site is very new to me, and I think will help my tech skills grow.

April 22, 2021

Thursday, April 22, 2021

Artifact : Post

On Monday I was able to finish the third episode of Good News with Gracie!!! So throughout the week I started to interview my classmates about their PIP projects and see the good news that they are spreading in the world. I interviewed two of my classmates Lincoln and Owen. Both of their project are very interesting and specific to their interests.

April 19, 2021

Monday, April 19, 2021

Artifact : Post

Last week I presented to my capstone class about Good news with Gracie. I got great feedback from my feedback partners Kyleigh and Owen. They both told me what I did well and also gave me things I should



Project Overview

Collaboration

About Me

Project Overview This project is about climate change, its effects on humans and wildlife, and how we can prevent it. I have done a lot of research and gone through many resources to find information and images for this project. I took up this project because I wanted to raise awareness about climate change and to save our future. Through this project I want to make an impact in creating awareness about climate education.

Thank You

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