

# Mentor Matching Program

Janine Stevens  
Bartlett High School



# Bartlett High School / STEM Magnet Academy

**Teach 3 of 6 Engineering Courses**

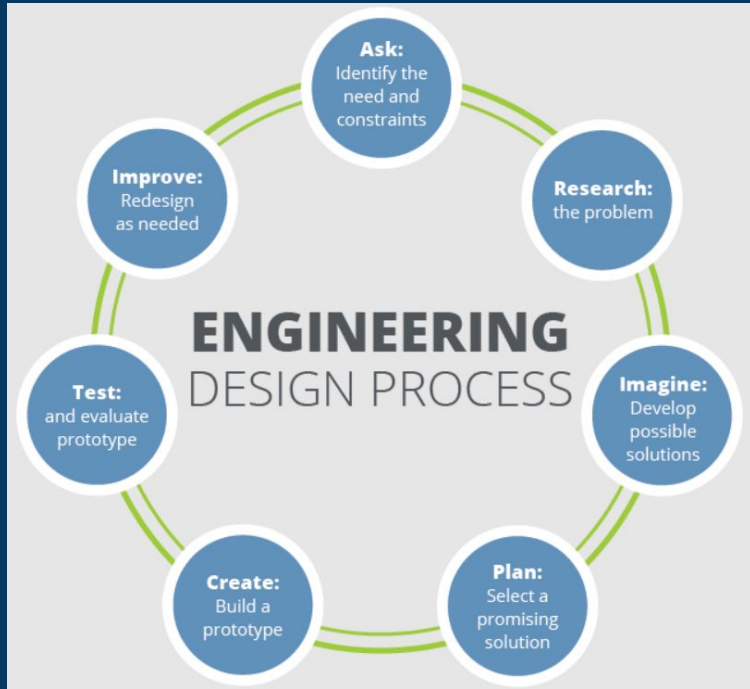
**Using MME for 5 years**

**Two Academy courses use MME**

**Three teachers at BHS use MME**



# Engineering Design & Development Course



Year Long Engineering Project

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Students Work In Teams Through the Engineering Design Process

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Define A Problem  
Write Criteria & Constraints  
Design A Solution  
Build A Prototype  
Test & Analyze The Prototype

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Juried Presentations  
Project Showcase

# Mentor Matching Teacher Activities

## ★ Student Work Prior to Searching for a Mentor

- Problem Statement is written
- Project Summary - [Template](#)
- Letter of Introduction - [Examples](#)

# Mentor Matching Teacher Activities

★ Student Work Prior to Searching for a Mentor

★ Help Students Choose a Mentor

- Students Search Mentor Bios - choose top 3
- Discuss Choices & Invite Mentor
- Log of Mentor Requests Across All Courses

# Mentor Matching Teacher Activities

- ★ Student Work Prior to Searching for a Mentor
- ★ Help Students Choose a Mentor
- ★ Send Course Information to Accepted Mentors
  - General Course Info & Teacher Expectations
  - Course Timeline/Major Due Dates - [Template](#)

# Mentor Matching Teacher Activities

- ★ Student Work Prior to Searching for a Mentor
- ★ Help Students Choose a Mentor
- ★ Send Course Information to Accepted Mentors
- ★ **Mostly Hands Off**
  - Present for Video Conferencing
  - Communication Issues
  - Special Circumstances

# Student Perspectives



**Our  
Students  
Typically  
Choose  
Engineers  
For  
Mentors**

**Familiarity with the  
Engineering Design  
Process**

**Possess Specific  
Technical Expertise  
or Engineering  
Project Expertise**



## ★ **Sharing Student Work**

- Problem Statements
- Criteria/Constraints
- Prototype Design
- Material Choice/Build Plans
- Test Plans

[Verbiage Examples/Communication Expectations](#)

# Student - Mentor Relationship

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## ★ **Sharing Student Work**

- Problem Statements
- Criteria/Constraints
- Prototype Design
- Material Choice/Build Plans
- Test Plans

## ★ **Video Conferencing**

- Saves a lot of time/emails back and forth

# Project Examples



## RED Sky

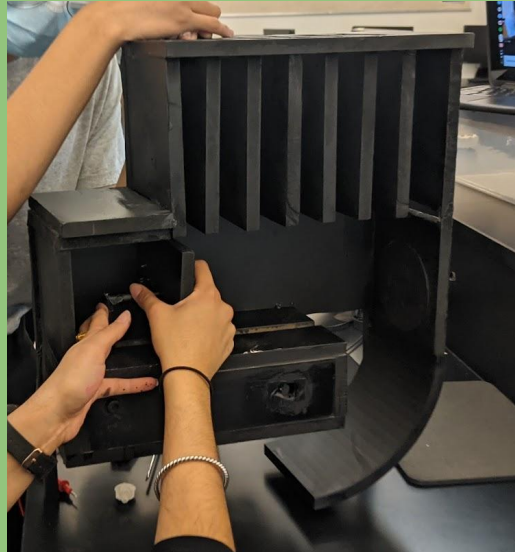
### Heads-Up Display



### Mentor Helped with:

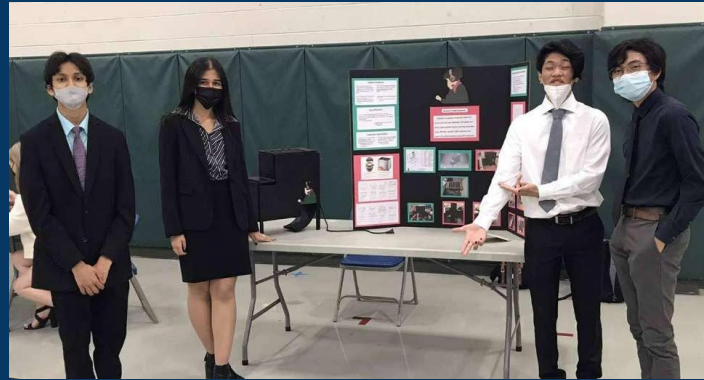
- Narrowing the Overall Concept
- Design Tips For Easier Building
- Material Choices

# Project Examples



2FI

## Automated Sandwich Maker



Mentor Helped with:

- Questioning the Overall Design Parameters
- Suggestions for the Design Itself
- Material Choices
- Reassurance that a Prototype is OK

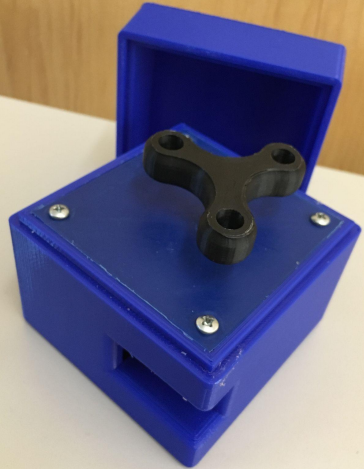
# Project Examples

## GirlCode

### Fidget Spinner Portable Charger

Mentor Helped with:

- Design Phase - Helped with Specifications
- Electronics Expertise
- Build Phase - Offered Help When Their Prototype Didn't Work



# Questions?

Janine Stevens

janinestevens@u-46.org

