PK-12 Lechnology & STEM

Board of Education Presentation January 23, 2024



This is our team.



Mr. Ziccardi
PK-12 Computer
Science Coordinator



Middle School Technology Instructional Leader

Mrs. Costello



Mr. Bella

High School Technology
Instructional Leader

Orchard Park Master Teachers

Tom Zinteck- Technology & Engineering, OPHS
Adam Ziccardi- Computer Science, OPHS
Maria Coats - Science, OPHS
Brian Dena- Math, OPHS
Joe Bella, Technology, OPHS
Christopher Betrus, Science, OPHS
Evan DeWald, Technology, OPHS
Lukas Gill, Technology, OPMS

Emerson Smith, Elementary Education - STEM, South Davis Melissa Vuich, Elementary Education, South Davis Nicole Costello, Computer Science, OPMS Jim Roland, Technology & Engineering, OPMS

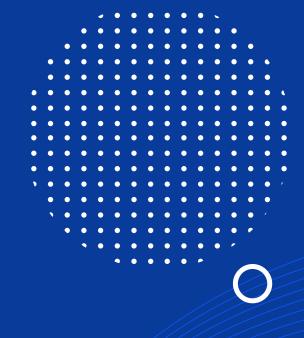


Pre-K-5 STEM Class

Four C's introduced with project based learning:

- Creativity,
 - Collaboration,
 - Communication,
 - Critical Thinking







2017: Addition of Computer Science into Elementary Computer Class through alignment to the ISTE Standards.

2022: Elementary STEM Program was created.





Invested federal funds in the creation of the Elementary STEM classrooms to create a comprehensive, Pre-K -12 STEM program.









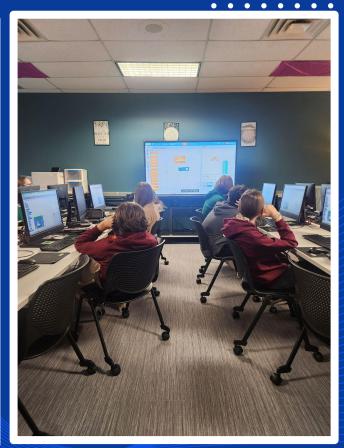




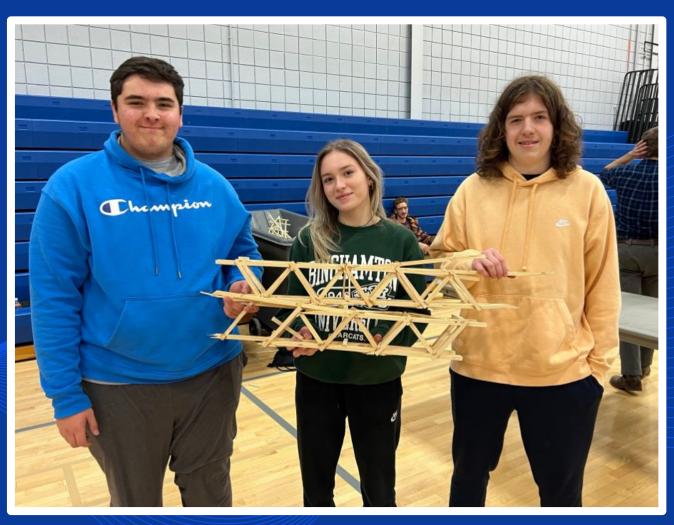














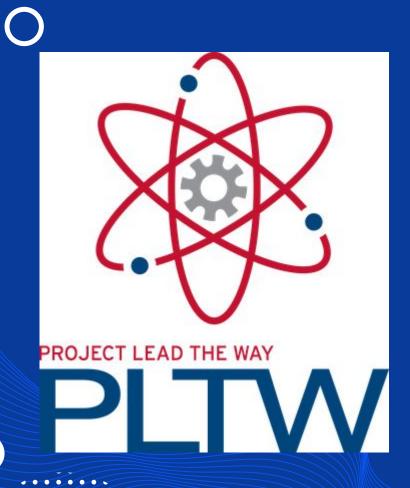












- Introduction to Engineering Design
- Principles of Engineering
- Computer Integrated Manufacturing
- Environmental Sustainability
- Aerospace Engineering
- Civil Architecture and Engineering
- Digital Electronics
- Engineering Design and Development





BOSS Laser Cutter/Engraver

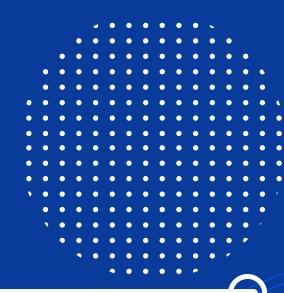
- 36" x 55" work area



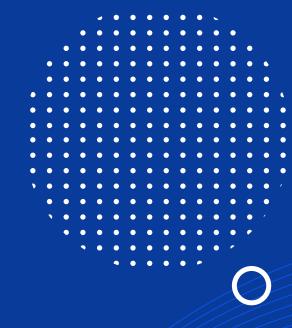




Technology and Engineering Education teaches students practical skills they can use every day, and provides a tangible way to express themselves!



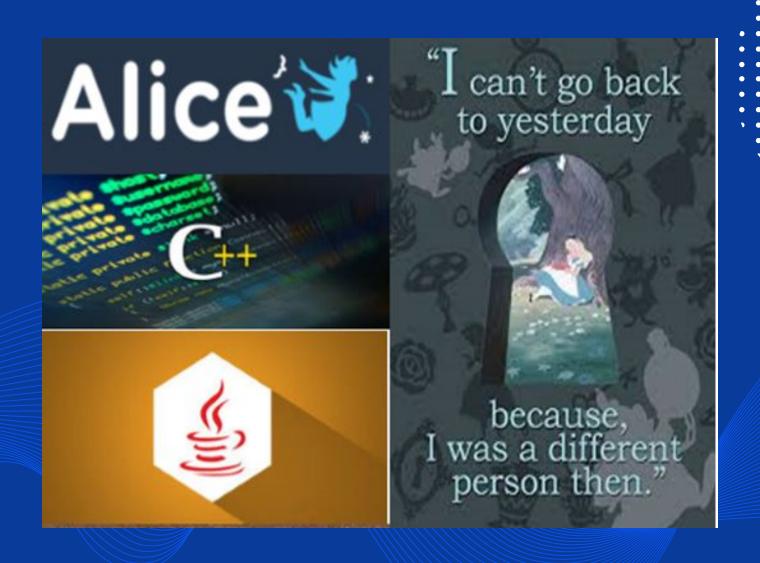




OPHS Computer Science

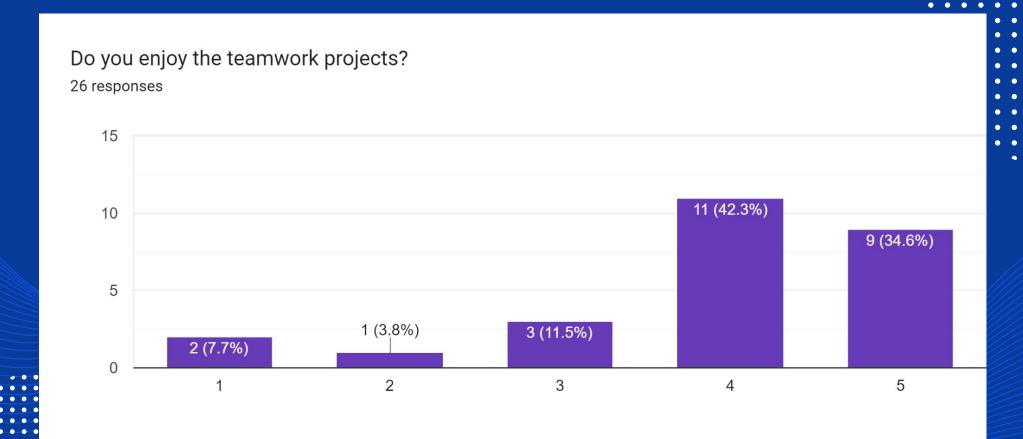


Presented by: Mr. Adam Ziccardi, Teacher and PK-12 Computer Science Coordinator



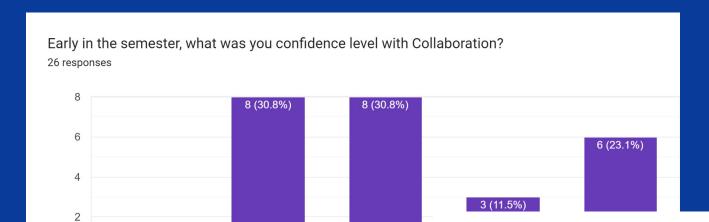


Impact of the Four C's





Collaboration

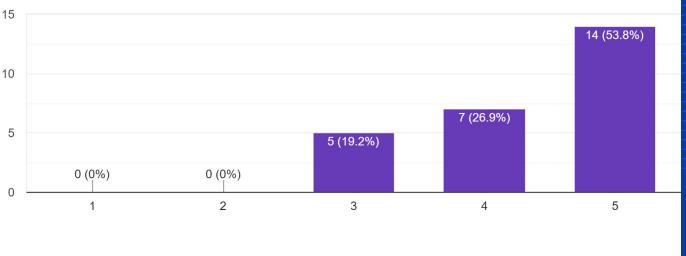


Today, what is your confidence level with Collaboration? ²⁶ responses



2

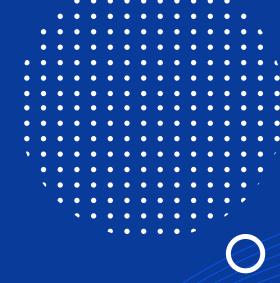
1 (3.8%)



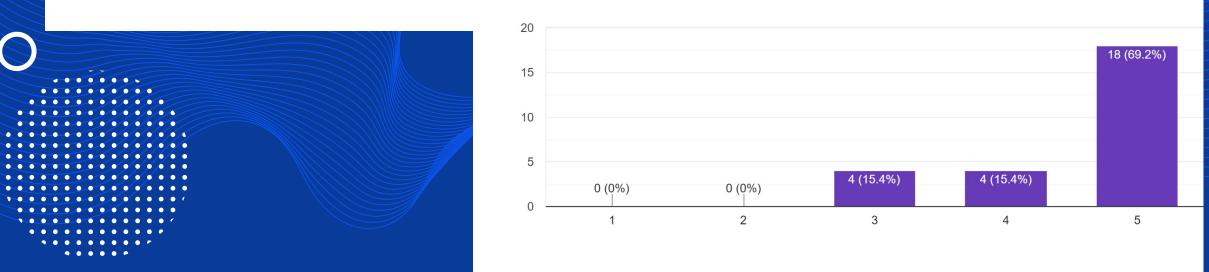
Communication



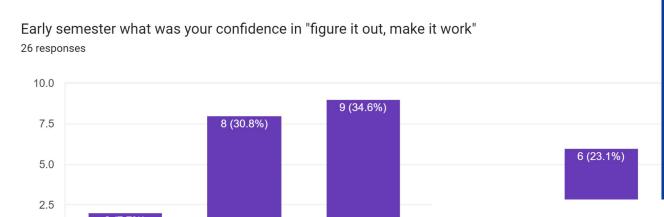
3



Today, what is your confidence level with Communication? ²⁶ responses



Create / Revise



Nowadays, what is your confidence in "figure it out, make it work" 26 responses

