

Student Summary Report

What is the PowerU experience?

CONGRATULATIONS! Your child just completed an immersive experience called PowerU. As a part of this experience, they were able to explore the world of technology & engineering as well as learn about the exciting possibilities in Science, Technology, Engineering, and <a href="Mathematical Mathematical Annal Mathematical M

During this 2-part experience, students were exposed to a few of the many black pioneers in history as well as current and emerging tech-related careers.

In the first **TECH ESCAPE** experience, students completed four missions by using their critical thinking and problem-solving skills. In these missions, students learned about:

- Marie Van Brittan Brown invented the first video home security system in 1966. It
 consisted of a peephole, a sliding camera, television monitors, and two-way
 microphones. This created a system called a closed circuit television system for
 surveillance, also known as CCTV. Her invention paved the way for the technology we
 use today.
- **Garrett Morgan** Notable inventions: the sewing machine, traffic light, and gas mask. The gas mask was instrumental in saving lives by protecting the wearer from smoke and ammonia
- Mark Kean/Dean co-inventor of IBM's original personal computer and the color PC monitor changing how we interact with the internet. This technology has allowed for the creation of keyboards, printers, and all the things that connect to your computer.
- Dr. George Grant Dentist who invented the golf tee.

In their second experience, **TECH MISSIONS**, students applied those same skills to complete one of three missions to solve real-world problems. Powered by <u>Learning Blade</u>, students completed a series of tasks where they learned about the tools and team members needed to solve a problem.

Taking the next steps with your child

Now, YOU have been assigned a mission! Continue the journey exploring STEM. You can get started by talking with your child about what they learned in PowerU and what they found interesting.

Effective STEM learning requires skills to not only analyze information and evaluate designs but also to create new ideas and propose creative solutions. The puzzles that were solved as part of the PowerU experience required logical reasoning and critical thinking skills which are the foundation of success within the field of STEM.



The value of a STEM career

There are many high-paying in-demand STEM careers. The Bureau of Labor and Statistics projects that industrial engineers will experience a 14% job growth between 2020 and 2030 and job growth for information security analysts will grow 33%! Furthermore, the U.S. Bureau of Labor Statistics cites that the national average wage of STEM occupations is nearly double that of non-STEM occupations. This will only increase as technology advances.

How to prepare for a STEM career

While many STEM careers require a college degree (e.g., cybersecurity analyst and data scientist), STEM careers are also accessible from many avenues with post-high school training and education. These careers can be found in industries ranging from technology to healthcare to business. <u>Click here</u> to learn more about career paths in STEM or visit <u>Learning Blade</u> and click the "Career Links" document for a consolidated list of career opportunities.

Here are some great organizations that often announce scholarships for students interested in STEM-related degrees:

- Black Data Processing Association
- Information Technology Senior Management Forum

Continue exploring

Start exploring exciting STEM careers and technologies now via Learning Blade!

- 1. Access Learning Blade here using the student self-sign-up code, e2a69c
- 2. Create a login
- 3. Visit the "Site Introduction" video under the Resources button to get familiar with all the features Learning Blade has to offer. You will find various Design Thinking Activities, Home Discussion Guides, and other activities to stimulate an interest in STEM.
- 4. Navigate to "My Missions" to explore additional lessons that you can complete with your child.

Additional information regarding STEM:

Learning Blade:

https://web.learningblade.com/Resources

• Careers in STEM:

https://www.learnhowtobecome.org/career-resource-center/careers-in-stem/



• The 5 C's of STEM education here:

https://goglobalways.com/blog/steam-focused-education-5cs-benefits/

- Popular social media channels:
 - 1. TikTok:
 - a. @Lab_Shenanigans
 - b. @NeillDegrasseTyson
 - c. @mkbhd
 - 2. Instagram:
 - a. @science.uncovered
 - b. @nina.draws.scientists
 - c. @women.doing.science
 - 3. Facebook:
 - a. https://www.facebook.com/techinsider/
 - 4. Twitter:
 - a. @kidsntech
 - b. @RobotMakerGirl
 - c. @drfeifei