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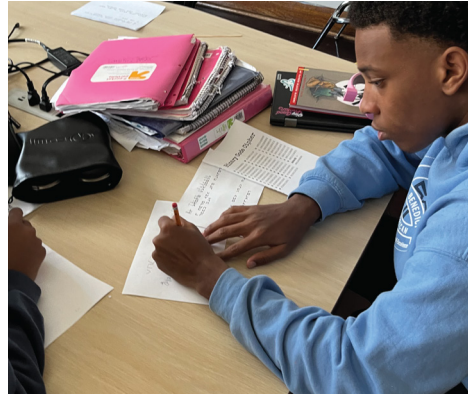
PATHWAY TO ADVENTURE COUNCIL - **STEAM**



Northwestern University

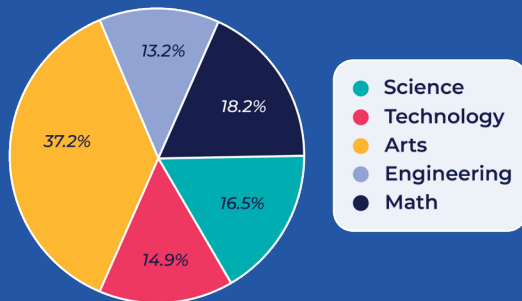


Jet Propulsion Laboratory
California Institute of Technology

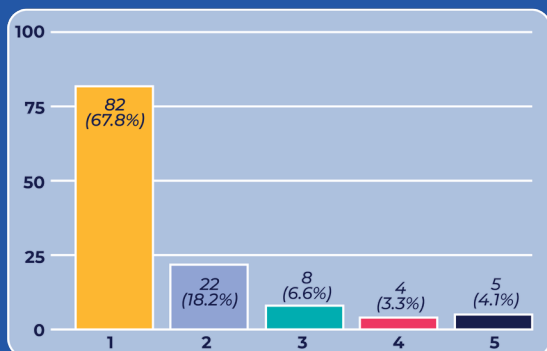


ABOUT the program

Pathway to Adventure Council, Scouting America, partners with Woz ED, Google, NOAA, Jet Propulsion Laboratory NASA, and Northwestern University to deliver fun, hands-on programming that sparks curiosity in science, technology, engineering, arts, and math (STEAM). In Chicago, middle schoolers engage in our STEAM program through the Exploring program, where they take part in real-world, workforce-focused activities and receive one-on-one mentorship. These experiences help youth build critical thinking, problem-solving, and leadership skills while discovering their interests and potential future pathways.



What STEAM Subject Are You Best At?



I know how to behave online safely
(1 = strongly agree; 5 = strongly disagree)

During the 2024–2025 academic year, 121 students participating in our STEAM program completed a survey reflecting on their experience. The results highlight the program’s positive influence on their curiosity, confidence, and readiness for future academic and career pathways.

Notably, **68%** of students reported a strong understanding of how to behave safely online, a crucial skill in today’s digital world. Over half (**52%**) expressed genuine interest in exploring STEAM subjects on their own beyond the classroom setting, demonstrating self-motivation and enthusiasm sparked by the program. Additionally, **69%** strongly agreed that it’s important to always be kind to others, reflecting the program’s emphasis on empathy and collaboration. While self-awareness can be challenging at a young age, **41%** of students already feel confident in identifying their strengths and weaknesses, suggesting meaningful personal development through the STEAM experience.

Together, these findings show that our program is not only equipping students with technical knowledge, but also nurturing the social-emotional skills and curiosity that help them grow into thoughtful, capable young leaders.

SCIENCE. TECHNOLOGY. ENGINEERING. ART. MATH.

STEAM Education will combine program partner curriculum with Scouting methods, such as the Scout Oath and Law, setting and achieving goals, leadership skills and adult role models. The program aims to produce young men and women who show leadership, display confidence, realize their skills and limitations, respect others' opinions, become problem solvers, look for opportunities to serve others, demonstrate good citizenship, and show integrity in all phases of their lives.

THE PROGRAM

- **Optical Illusions**
- **Graphic Design**
- **Forensics**
- **Bridges**
- **Cybersecurity**
- **Maze Making and Puzzles**
- **Mobile App Design**
- **Robotics**
- **Fabric Science**
- **Chemistry**
- **AI**
- **Drones**
- **Weather Science**
- **Animation**
- **Paper Science**
- **Paint Science**
- **Flight Science**
- **Circuitry**
- **Coding with BitsBox**
- **Cryptography**
- **Simple Machinery**



Among the many STEAM activities offered, 3D pens were a clear favorite, as mentioned by over half of students. “You can use your imagination to make basically anything,” one student said, while another shared, “I was able to think about something and draw it in real life... it was very calming and fun for me.” The activity blended creativity and engineering in a hands-on, confidence-building way.

Decoding was another standout, with students enjoying the challenge of solving word puzzles and cracking hidden messages. One student noted they liked “finding strategies that repeat in order to figure it out,” reflecting how the activity built problem-solving skills while feeling like a fun game.

