

SUMMER EXPERIENCE 2018 | FINAL REPORT

# A FOCUS ON STEAM

What is STEAM? It's an acronym for science, technology, engineering, art and math, and it's an **essential** part of education today. ImagineIF Libraries began incorporating STEAM learning in our summer youth offerings in 2015. We didn't know we were joining a **select group of libraries** including Chicago Public Library, Seattle Public Library and the Philadelphia Free Library who began offering STEAM summer programs around that time. Research demonstrates that over the summer, **students suffer learning losses** in not just reading but also math and science, where the losses tend to be even greater. And lower income students who lack access to summer learning opportunities tend to experience an **additional two to three months** of learning loss.

ImagineIF Libraries' Summer Experience aims to **close that gap** for local children and teens. By presenting a robust nine week program, area youth access hands-on opportunities to explore science, technology, art and more. Our 2018 program for children offered **drop-in programs** with explorations in the physics of light, color and sound; the science of aerodynamics; and the properties of water. Children experienced the **wonder of learning** and the **fun of science** right here in the Flathead.

Our Teen Summer Experience program focused on building **21st Century skills** like collaboration, experimentation, design, and resilience. Teens flocked to workshops where they crafted soda pop, constructed robots and mastered forensic science. These events' popularity led us to **schedule extra sessions** to meet demand.

We thank our generous funder **Applied Materials** for making our 2018 Summer Experience programming possible.



# WONDER

## ages birth-10

Our 2018 Summer Experience successfully engaged children in **experiences of wonder** and **exploration**. Kids delighted in our science theme this year, with an **18% increase** in program attendees from last year and a **30% increase since 2014**, our inaugural STEAM summer learning year. DIY helicopters zoomed around the library to ecstatic shrieks during the flight program Fly Away, and we explored pitch, vibration, and frequency during Hullabaloo.

Bigfork saw a **50% increase** in registrations, leading to a **23% increase in materials circulation** during the summer months. Registration system-wide maintained last summer's numbers, and we experienced a successful **44% participation rate** compared to the 40-50% national average.

We once again brought a science museum experience to Kalispell and Columbia Falls. Educators from **Missoula's spectrUM Discovery Center** encouraged kids to dissect sheep brains, try their hand at brain teaser activities, and wear fuzzy critter headsets that responded to brainwaves during their exciting **Brain: A World Inside Your Head** exhibit.

Our gameboard challenged kids to paint a rainbow with their feet, design their own sprinkler, and explore exploding art. **Families gave warm praise** for our blend of self-directed STEAM adventures and **reading goals**.



**“Public libraries are in an ideal position to deliver education programs over the summer because of their strengths as trusted community hubs for learning.”**

- National Summer Learning Association,

# ADVENTURE

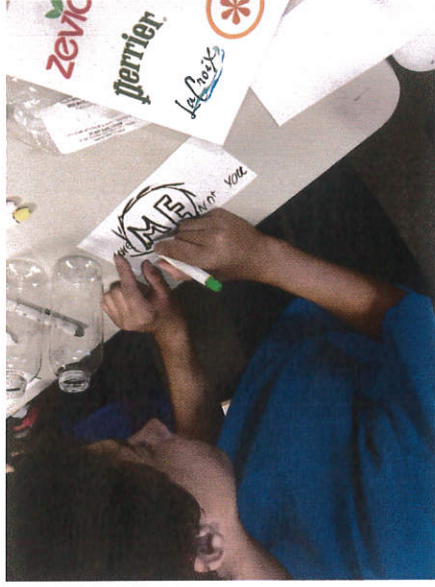
## ages 11-17

Our **Teen Summer Experience** saw rich engagement with teen participants as they collaborated and explored **STEAM**, forensic science and design. We saw small participation increases in Bigfork and Columbia Falls, with completion numbers level with last year and a **highly successful 48% completion rate.**

During our Soda Works program, teens became soda pop designers by concocting custom flavors, carbonating their beverages and crafting a brand identity. Such programs present opportunities for teens to **flex creative muscles**, collaborate with one another, and **envision themselves as inventors**, tastemakers and marketing gurus.

Teens created robots and battled for bragging rights as **they learned about electronics**, physics and engineering. We invited teens to become crime scene investigators during our Escape Room in which only **mastery of forensic skills** and teamwork could lead to their escape.

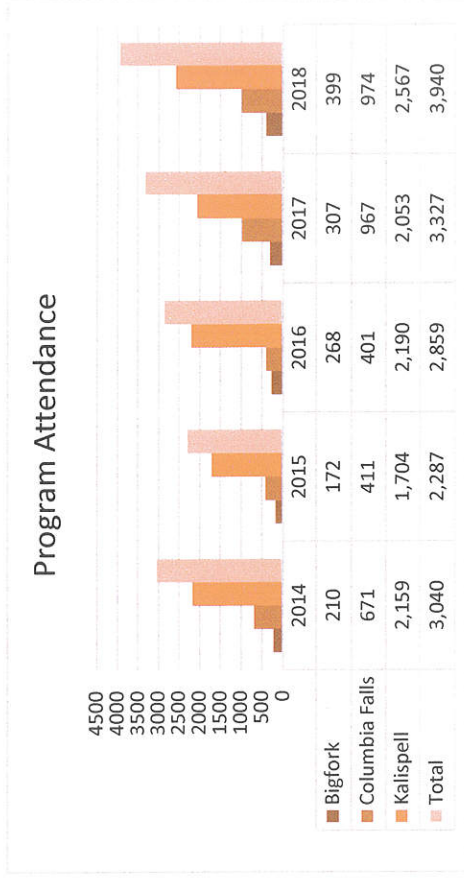
Teens devoured their **gameboards**, captivated by the promise of free books and the chance to win \$50 Visa gift cards and a Tomoloo hoverboard. In doing so they **challenged themselves with 21st century learning** and high-quality STEAM experimentation, making this year's Teen Summer Experience a rousing success.



**"Studies show . . . summer learning programs can produce statistically significant gains in reading performance."**

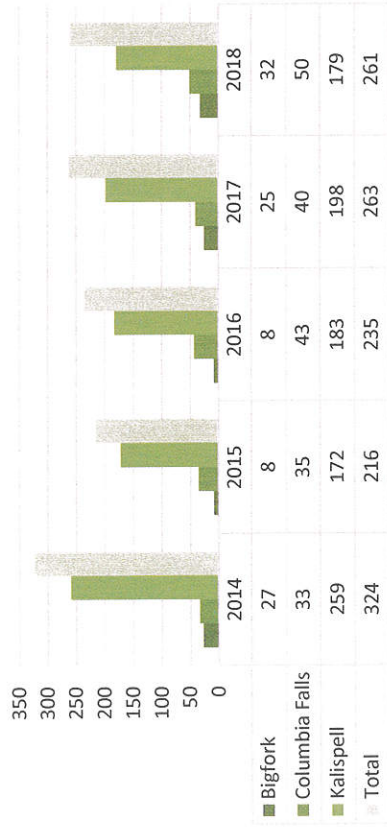
- Campaign for Grade Level Reading

# Children's Performance Report 2014-2018



# Teen Performance Report 2014-2018

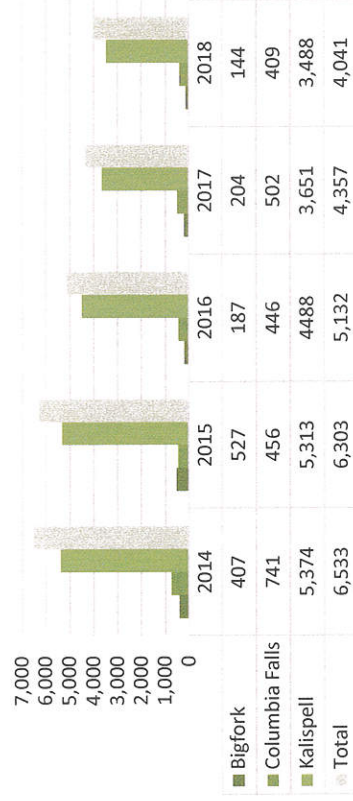
### Registrations

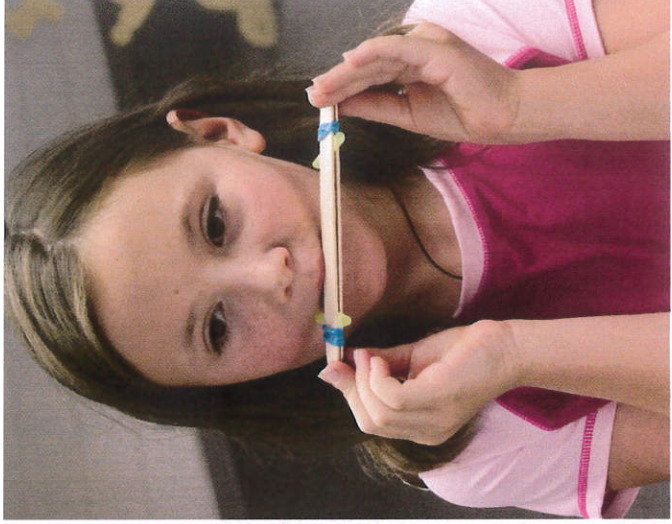


### Program Attendance



### Circulation of Teen Materials





Program Sponsor