

PNC Grant for Jump STEAM

A Jump Simulation Case Study

THE OPPORTUNITY

Recognizing the need to develop a local pool of talent interested in health care-related careers, Jump Simulation, a part of OSF Innovation, created the STEAM (Science, Technology, Engineering, Arts and Math) program in 2017. Jump STEAM courses target students in middle school all the way through college, offering hands-on experiences in everything from anatomy and physiology to developing a virtual reality experience. Hundreds of students take advantage of these courses annually, but Jump still wanted to reach more young people.

THE SOLUTION

OSF HealthCare Foundation, on behalf of Jump, sought charitable donations to extend the program to those who may not be able to afford a course as well as those who are being treated at the OSF HealthCare Children's Hospital of Illinois. The success of the STEAM program inspired the PNC Foundation to award a \$400,000 grant to Jump toward this effort.

THE IMPACT

The grant, dispersed over five years, funds the work of five Jump college interns annually to design and deploy STEAM education toys that will be used by OSF Children's Hospital patients. The money also funds 1,000 student scholarships for low-to-moderate income students to attend STEAM courses at Jump. The PNC Pediatric Classroom at OSF Children's Hospital, which offers tutoring and support to patient-students, also receives additional funding through this grant. More than 20,000 patients and students are expected to benefit from the five-year PNC grant.



JUMP SIMULATION

Jump Simulation, a part of OSF Innovation, is one of the world's largest simulation and innovation centers with the Vision of improving outcomes and reducing costs through excellent training. For more information, visit www.jumpsimulation.org.

OSF INNOVATION

Launched in 2016, OSF Innovation is the overall umbrella initiative for the planning, structure, goals and services OSF HealthCare uses to innovate for the improvement and transformation of health care.

To learn more, visit osfinnovation.org/CaseStudies

GIVING EVERY CHILD THE OPPORTUNITY TO STUDY STEAM

The U.S. continues to face a significant shortage of graduates with degrees in Science, Technology, Engineering and Math (STEM). According to a 2012 report by the President's Council of Advisors on Science and Technology, the nation needs to increase the number of STEM graduates by one million to meet projected employment needs in 2022.

Recognizing this gap, what it means for health care and the need to keep students local, Jump Simulation, a part of OSF Innovation, created the STEAM (Science, Technology, Engineering, Arts and Math) program in 2017. The idea was to not only introduce students to STEAM concepts early, but to immerse them in hands-on activities that could ignite an early passion for health care-related careers.

Jump STEAM courses target students in middle school all the way through college, offering experiences in everything from anatomy and physiology to developing a virtual reality experience. Hundreds of students take advantage of these courses annually, but Jump still wanted to reach more young people.

EXTENDING EXCITEMENT TO DONORS

With OSF HealthCare Children's Hospital of Illinois serving hundreds of kids every year, Jump wanted to ensure that teens who face extended hospital stays have the chance to participate in STEAM programming. Jump also had an early goal in mind to offer scholarships to those without the means to get involved. It just needed the funding to make these ideas a reality.

OSF HealthCare Foundation, on behalf of Jump, sought charitable donations, inspiring the PNC Foundation to award a \$400,000 grant for this effort.

"We understand how important it is to introduce young minds as early as possible to math, science and the arts," said Brian Ray, PNC regional president for central Illinois. "We're excited to support a program that reaches as many children as possible to spark that passion for engineering, science, health care or whatever creative path they choose."

The grant, dispersed over five years, funds the work of five Jump college interns annually to design and deploy hands-on STEAM education kits for OSF Children's Hospital patients. The kits are

being made available for children's hospitals around the country to download and implement, expanding the impact of this innovative program nationwide.

The PNC Pediatric Classroom at OSF Children's Hospital, which offers tutoring and support to student patients, receives additional funding through this grant. The money will also fund 1,000 student scholarships over the next five years for low-to-moderate income students to attend STEAM courses at Jump.

YEAR ONE IMPACT

As a result of the PNC funding, the Medical Visualization (MedVis) and Engineering teams at Jump in collaboration with five college interns developed a 3D printed Rube Goldberg toy as well as a 22-page coloring activity book on anatomy for children younger than 10. The interactive book works in tandem with a free smart phone app called "About Me 3D" that uses augmented reality to create an immersive and engaging experience.

For example, kids can color a heart that pops out of the page when triggered by the mobile app. Another page activates a video about digestion. One interactive feature allows kids to destroy harmful germs and other body invaders. The book is downloadable on the Jump website and the app is available for iPhones and Androids.

Jump began offering scholarships for low-to-moderate income Peoria Public School students interested in attending STEAM Saturdays programming in fall 2018, with 72 scholarships awarded per season. The scholarship program opens to all students in fall 2019.

Through the PNC grant, the STEAM program is expected to reach more than 20,000 patients and students over the next five years.

"We share PNC's vision of addressing the needs of children through STEAM programming and are very grateful for their financial support. This funding not only allows us to expand our STEAM courses to every child who wants to participate, it also gives us the opportunity to leverage brilliant technologies that will have a lasting impact on children around the country."

- DR. JOHN VOZENILEK, VICE PRESIDENT AND CHIEF MEDICAL OFFICER OF JUMP SIMULATION

The course offerings will be posted on the Jump website, jumpsimulation.org.

To learn more, visit osfinnovation.org/CaseStudies

