

A SPARK OF IMAGINATION!

BY CAILIN RILEY

THE SUNDERLAND FOUNDATION INNOVATION LAB OFFERS ENDLESS OPPORTUNITIES TO EXPLORE AND CREATE

The first time Mike Finnegan wandered into the Sunderland Foundation Innovation Lab, he was driven by both curiosity and a desire to compile years' worth of documents.

A retired K-State professor and former consultant in forensic anthropology, Finnegan was on the search for someone who could help him digitize his personal files, which included several photo negatives and more than 100 floppy discs.

With the help of lab staff, Finnegan walked out that day with everything on a single 16-gigabyte flash drive.

Free from his floppy discs, Finnegan currently enjoys working with the lab's 3D printers, which he said give him ideas for woodworking at home.

"The people who staff the lab are exceptional," Finnegan said. "They're very helpful. What would normally take me an hour only takes them five minutes. The lab has a broad array of uses and technology, but it's the staff members, with their depth of knowledge, that make the lab the place that it is."

LEARNING THROUGH EXPERIMENTATION

At the Sunderland Foundation Innovation Lab, students, staff, faculty and community members have access to the latest innovative technologies. The mission of the lab is to make specialized technology accessible to all and provide opportunities to explore new ideas.

The spaces within the lab support a variety of skills, including videography, textiles, audio mixing and more. The beauty of the Innovation Lab, associate director



Mike Finnegan stands next to the lab's 3D printers, which he uses to test designs for his woodworking projects.



The K-State EdCats have used the lab frequently as a space to create tech-friendly lesson plans and practice classroom skills.

**"IN THE LAB,
STUDENTS CAN
FREELY TEST THEORIES
AND LEARN
AT THEIR
OWN PACE."**

— JEFF SHELDON

Jeff Sheldon said, is that it gives users the freedom to test out ideas without the fear of failure.

“Often in academia, there are tests and grades that put weight on a student’s shoulders,” Sheldon said. “In the lab, students can freely test theories and learn at their own pace.”

Many K-State faculty supplement their curriculum by providing lab offerings for student course projects. The lab offers a way for students to connect experiential learning with what they learn in the classroom. By playing with tools and software, they can often grapple with tough concepts in a tangible way.

For example, K-State students studying education, widely known as EdCats, have utilized the Innovation Lab as a brainstorming space where they can collaborate while creating lessons that include the latest in technology. Some of the students’ favorite tools to use include the One Button+ studio and the Liquid Galaxy display, both of which allow them to practice classroom skills.

Education instructor Kaylee Myers, who worked with librarian melia fritch to develop the assignments, said the College of Education’s partnership with the lab equips EdCats with the skills they’ll need as future educators.

“With the introduction of AI technologies, we have no idea what the future in teaching and learning holds in the next few years,” Myers said. “Experimenting with these innovative teaching tools enables the development of adaptability and problem-solving skills necessary for today’s educators.”

GOING BEYOND THE CLASSROOM

Students, staff, faculty and visitors can learn new skills by attending workshops hosted by the lab which cover the basics of a wide variety of topics, including sewing, quilting, videography, photography and more.



The lab hosts a variety of workshops throughout the year that are open to anyone. The sewing workshops are particularly popular and spots fill quickly.

Community members and students can also take part in summer camps that use the lab’s resources to supplement their programs. One such program is Camp Sketchapod, an arthropod illustration workshop during which college students and early career professionals studying entomology spend three days learning the basics of illustration.

This past summer, campers used a variety of spaces, including the media lab and makerspace, to explore both traditional and digital techniques of drawing. The head of the entomology department, Brian McCornack, said the participants were excited by the number of technologies available to them in the lab.

“Our campers loved everything about the space!” McCornack said. “A couple of them were K-Staters, and it was a joy to witness them really explore and relish in knowing that they have a space like this right here

on campus.”

Throughout the school year, and especially during the summer months, the lab hosts a variety of community and school programs. For many of these children, exploring and playing in the lab is their first introduction to K-State.

Felix Lopez, an eighth grader at Axtell Community School in Axtell, Nebraska, said his favorite space in the Innovation Lab during his summertime visits is the Fabspace. Lopez used the 3D printers and laser cutters to create a chess board and set with Dwayne “The Rock” Johnson’s face on every piece.

Lopez said he appreciates the lab staff’s support with his project and encourages others to try their own wacky designs.

“Don’t give up on your project if something fails the first time,” Lopez said. “I had a lot of trial and error

During Camp Sketchapod, campers learn how to use the lab’s technology to practice digital illustration.



Campers use both traditional and digital tools to create drawings of arthropods.





"Experimenting with these innovative tools enables the development of adaptability and problem-solving skills."

— KAYLEE MYERS, COLLEGE OF EDUCATION





Felix Lopez, a frequent visitor to the lab who earned an honorary employee name badge, designed and printed a chess set with Dwayne "The Rock" Johnson's face on each piece.

before I was happy with my finished product. The lab is a place where you can make dreams and ideas a reality."

BUILDING INNOVATIVE COMMUNITIES

As part of a public-facing, land-grant institution, the Innovation Lab stands by a responsibility to support the needs of not just the campus, but the wider Kansas community. The lab welcomes people from all

backgrounds, world views, ages and skill levels. In addition, the lab seeks to increase community access to technologies that are often inaccessible to many.

"Many people don't have access to technology such as 3D printers or recording studios because you either have to pay to use them or enroll in a course or program before you can begin to access them," Sheldon said. "A large part of our mission revolves around providing a neutral space where people can explore these resources for free."

But maintaining free access to the lab's technologies is its own challenge.

Lab staff members are striving for new ways to keep the lab's operations sustainable, which greatly relies on support from K-State staff and faculty, along with community members and donors.

Keeping the lab a free and assessable resource for the community is critical, but as it stands, the nature of ever-changing and improving technologies requires the lab to continually offer new technologies and software.

In addition, the machines and equipment need consistent updating and finetuning to remain in top-notch shape for users. Ongoing funding can help offset some of the costs to keep the lab freely accessible to all, but Sheldon notes that donations of supplies, including craft materials or scrap fabric, are always welcome and needed.

As the Innovation Lab continues to grow, it is Sheldon's hope that lab staff can add more technologies and programs to benefit rural Kansans and other underserved groups.

"In line with K-State's new strategic plan, which emphasizes connecting campus with state, we want to focus on helping others develop similar spaces to enrich their own communities," Sheldon said. "That includes working with peers to share our resources and swap stories of what we've all learned. If we can work together to identify our common challenges, then we can find ways to help each other find innovative solutions."

lib.k-state.edu/innovation-lab



THE LAB'S SPACES AND EQUIPMENT

SINCE THE OPENING OF THE LAB

An average of **2,500** people visit the lab each month

More than **8,000** items have been created with 3D printers

2,970 people have checked out equipment from the IT checkout desk



Visitors interested in the visual arts have access to a **media studio** that includes more than 19 computers with video, image and sound-editing software.



The **One Button+ Studio**, which is one of the lab's most popular spaces, provides a video recording system that is easy to operate and ideal for presentations and interviews.



Both the **Liquid Galaxy** display and the **immersion studio** offer an experience where users can explore ideas and places in a fully immersive environment.

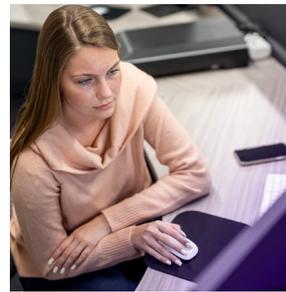


In the **Fabspace**, visitors interested in textiles and fabrication can use 3D printers, laser cutters and more.

The **artificial intelligence studio** aids with machine learning and AI development; some students have used AI software in the lab to create prototypes for 3D printing.



The **Makerspace** provides a place for users to pursue handcrafted projects. It offers a variety of tools, materials, sewing machines, sergers, a Cricut and a t-shirt press.



The **sound studio** includes state-of-the-art audio recording equipment for music and podcasts.

The **equipment checkout** desk offers a wide array of equipment for patron use, including laptops, cameras, green screens and lighting equipment.



Currently, lab staff members are working to complete a fully outfitted **video production studio**, which will feature a control room, adjustable stage-grid lighting and microphone array.



Help keep the Innovation Lab free and accessible. Designate Sunderland Innovation Lab for your giving.

ksufoundation.org/give/libraries

