

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Nebraska Innovation Studio

Nebraska Innovation Campus

9-17-2021

Nebraska Innovation Studio Celebrates Six Years of Making

Chris Dunker

Lincoln Journal Star

Follow this and additional works at: <https://digitalcommons.unl.edu/nicstudio>



Part of the [Entrepreneurial and Small Business Operations Commons](#), and the [Technology and Innovation Commons](#)

Dunker, Chris, "Nebraska Innovation Studio Celebrates Six Years of Making" (2021). *Nebraska Innovation Studio*. 23.

<https://digitalcommons.unl.edu/nicstudio/23>

This News Article is brought to you for free and open access by the Nebraska Innovation Campus at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Nebraska Innovation Studio by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

https://journalstar.com/news/local/education/nebraska-innovation-studio-celebrates-six-years-of-making/article_d90ed0c2-3198-53e1-932f-65d8d6518e51.html

EDITOR'S PICK

Nebraska Innovation Studio celebrates six years of making

Chris Dunker
Sep 17, 2021



Phil Whitmarsh (left) and Broderick Fielding, who both make guitars, talk about their instruments during an open house at Nebraska Innovation Studio on Thursday.

GWYNETH ROBERTS, Journal Star

Chris Dunker

WE SAY
**SAVE
IT**

Le
for

Visitors sample the offerings of Nebraska Innovation Studio during an open house on Thursday, Sept. 16, 2021.

When it opened in 2015, Nebraska Innovation Studio had a wide selection of tools and equipment and an open floor plan.

Like many of the projects it has birthed, the potential was there to be filled.

Now, six years later, the makerspace at Nebraska Innovation Campus is celebrating its growth and development into a 16,000-square-foot facility that has scratched the itch for makers of all stripes.

“I actually think the desire to make something in the physical world is hardwired in our brains,” said David Martin, director of Nebraska Innovation Studio.

The inherent need to turn raw materials into something special was something that struck Phil Whitmarsh, who turned from a buyer of guitars into a maker.

Using reclaimed wood from a 1870s-era warehouse in Omaha’s Old Market, soft pine hardened by more than a century of vibration, Whitmarsh saw an opportunity to design his own guitar base he said provides a bolder sound for an electric guitar.

Using the equipment at Nebraska Innovation Studio, Whitmarsh began to design Telecasters and Stratocasters, and get them into the hands of local players and touring musicians to see if he was onto something.

“If you can imagine it, you can make it happen here,” he said. “And that



Le
for

At about the same time, Broderick Fielding, a mechanical engineering student at UNL, was also interested in building his own electric guitar, something that could mimic the sounds of The Pixies or Jimi Hendrix at open-mic nights around Lincoln.

Instead of transforming old floor joists into a top-of-the-line instrument, Fielding envisioned an electric guitar that contained all of the components — power source, amplifier and pedal — right in the body.

So like Whitmarsh, he tinkered away for hours at a prototype that operated from a motorcycle battery and had a speaker fastened to the bottom until he came up with a design he liked.

Fielding then built a more polished, compact version powered by lithium batteries, wiring all the internal components himself.

“Fortunately, my skills in electronics exceed my skills in building a guitar,” he said.

The end result was something unique and cool, and illustrated what Nebraska Innovation Studio is all about, Martin said.

“The whole goal for this place is to be a community of makers, and to gather together these different kinds of expertise,” Martin said. “There’s sort of that knowledge spillover, and you definitely see that.”

More than 3,000 people have signed up to use Nebraska Innovation Studio since it opened, and there are between 250 and 350 active users in any given month.

While the makerspace closed for five months during the pandemic, Martin said he’s seen makers start to come back, particularly as Nebraska Innovation Studio has added new equipment and tools that are hard to come by.

There are wood lathes and drill presses, plasma cutters and tube benders, soldering irons and glass kilns, among about 60 different pieces of equipment, as well as professionals there to help answer questions.

The makerspace has drawn crafting amateurs, Etsy entrepreneurs, students completing class projects, grad students and faculty doing research, and start-up companies testing their production capabilities.



Le
for

A small company from Chicago that manufactures prosthetic hands came to Innovation Campus to use the 3D printer, extending the runway on its start-up money in the process, Martin said.

Rural Nebraska libraries reinventing themselves in 'makerspace' movement

Nebraska Innovation Campus has also been used to treat veterans returning from the wars in Afghanistan and Iraq through a program called Veterans in Recovery.

After running a similar program in San Diego, Jim Young launched a program here after moving to Nebraska in 2016, partnering with the Veterans Administration to help those with PTSD or traumatic brain injuries, as well as substance-abuse issues.

Veterans in Recovery provides veterans a free membership to Nebraska Innovation Studios where Young, himself a veteran of the U.S. Navy, teaches them to turn pens on a lathe.

“They concentrate on a specific task for 30-40 minutes at a time, and that really helps them,” Young said.

The end result — ink pens made out of wood, plastic, vinyl, even a pine cone and featuring any kind of design imaginable — gives the veteran something they can give as a gift, or sell to make a profit.

Plus, it opens the door to other possibilities inside Nebraska Innovation Studio, Young said.

The program started with 15 veterans and has gone on to enroll more than 200 people, even after the makerspace closed down for the pandemic.

Whitmarsh said after refining his design in the makerspace at Nebraska Innovation Campus and a wave of positive feedback, his Old Market Guitarworks will soon start building custom guitars to fit individual players' preferences, and with unique flourishes.

The company is working with metalworkers at the studio to come up with a medallion featuring the Old Market building where Whitmarsh sourced the old wood to be installed in each guitar.

The makerspace, both the equipment and the experts available, have been instrumental — no pun intended — in helping him refine his craft as Whitmarsh pursues his passion

"The only limitation is your imagination."



Le
for