

INVENTIVE MINDS

Innovators ignite a passion for science

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LEADER-POST

With motors whirring and robots beeping, the Saskatchewan Science Centre was a hub of innovation-minded activity during the first ever Ignite! Festival. "Science isn't something that just happens in a classroom," said Ryan Holota, the science centre's director of business development and visitor services. "It's a celebration of making."

Holota said the science centre looked out to the community to find people using science and technology in interesting ways. The exhibitors came back with ideas from using Lego art, to centuries-old camera technology, to 3D printers and many things in between.

"We thought that this event would be a great way to ignite scientific creativity and innovation, and to get people thinking about how they can use science in their everyday life," he said. Below are descriptions of the exhibitors' work.

The Ignite! Festival continues today at the Saskatchewan Science Centre.

**David Martin,
R2-D2 builder**

David Martin completed



light was a working steam engine and threshing machine chugging away at one end of a table.

"They're all scratch-built out of whatever I can lay my hands on," said Moulding, a longtime model maker who started off with Meccano sets.

While the technology itself may not be new, advancements in small motors make it easier to run the tiny machines.

What does he hope visitors will take away from his exhibit?

"You can do anything you put your mind to," Moulding said.

**Gerald Saul,
Camera obscura**

Ducking under a dark cloth, visitors can just make out the reflected image of Gerald Saul as he sits under a bright light a few feet away.

The hand-built camera obscura has a hole on one side, where light passes through. Light from the scene hits a mirror and is reproduced, with colour intact.

"These date back perhaps thousands of years," Saul said. "Camera obscura means dark room."

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David Martin, R2-D2 builder

David Martin completed an exact replica of Star Wars' beloved R2-D2 just under a year ago and has been playing with the robot ever since.

At Winnipeg's Central Canada Comic Con, or C4, Martin and his bot were cheered by fans.

Martin, who farms near Katoonan, said he built over a two-year period and farming season.

It was a bit of a group effort to build the bot, Martin said, with the members of the International R2 Build-Club chipping in their expertise when needed.

It's good that the builders have a club that it has been commissioned by George Saks to make one for the movie, Martin said.

Applied, but the Saskatchewan-based droid — first made in the province — would be too far from Martin, in case anything malfunctioned.

It teaches you basic electronics, but basically it's fun," Martin said. "Kids

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"All new technology is based on old technology," Saul said. "It's not as showy as R2-D2, but it's a bit of a surprise. It's this fusion of art and science and people can appreciate it on a very humanistic level."

Casey Sakires, ScribbleBots

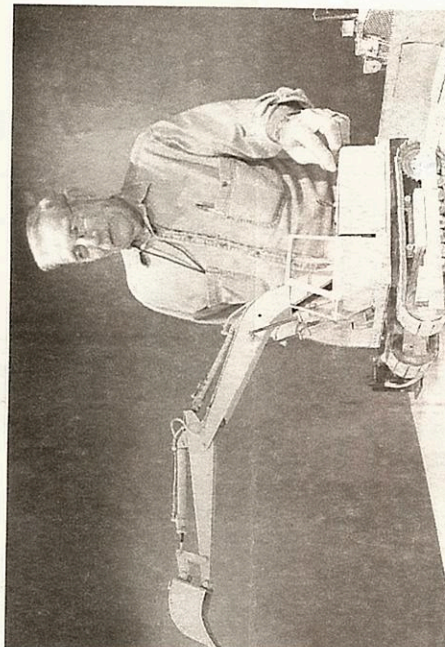
There's a pink pen scribbling furiously on a sheet of paper, but no one is holding the end.

"It's basically creating a picture using an offset motor," Casey Sakires, a science educator at the Saskatchewan Science Centre said. "It's the same motor that makes your cellphone vibrate."

The basic premise is to allow anyone to be creative and use a little bit of electrical know-how at the same time, he added.

"They learn that science can be combined with many things. When some people think of science, they may not make the artistic connection," Sakires said.

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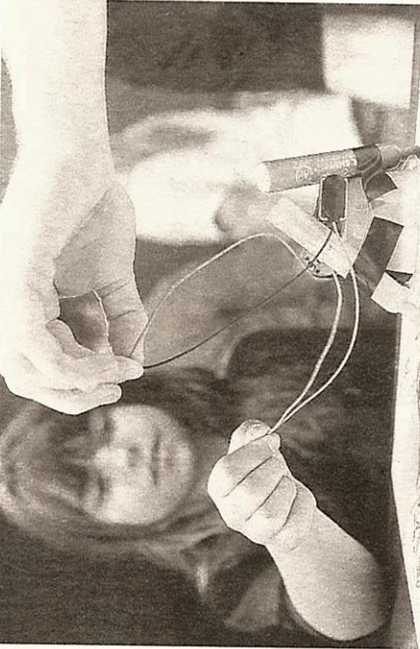
someday, he said.

Dick Moulding, Model maker

A wide array of bright yellow model farm and road equipment was spread across Dick Moulding's exhibition table, but the high-

While most designs are downloaded, Martens modelled some himself, including a tiny Etch a Sketch and a stickman figurine.

As technologies advance, 3D printers like the ones he had on display could even become old-fashioned



Clockwise from top: Rick Martens holds a nerf gun made from a 3D printer, Gerald Saul works with Camera Obscura, Dick Moulding works with scratch-built models, the trio of Mike Schlosser, left, David Martin and Chad Wood are R2-D2 builders and ScribbleBots capture Alexyn Ward's attention at the Ignite! Festival at the Saskatchewan Science Centre on Friday.

show what could soon be commonplace.

"3D printers is sort of the future, I think," said Martens, who was representing Crash Bang Labs.

"They're starting to get in schools, the libraries are getting some."

Rick Martens, 3D printer

From steampunk-styled Nerf guns to Lego bricks made from a 3D printer, Rick Martens was ready to