

December 10, 2018 – Front Page

## GM, Ford, FCA Participate in Science Event

### *Hands-on Demonstrations Highlight MCC Annual Education Gathering*

by Jim Stickford

Macomb Community College (MCC) and several automakers and auto suppliers put on the annual Auto STEAM Days gathering to educate local students on possible careers in Science, Technology, Engineering, Arts and Mathematics/Manufacturing (STEAM).

Sean Patrick, the manager of Media Relations at MCC, said that the school has been holding the event for more than a decade. This year it was held over two days, Dec. 5 and Dec. 6. On Dec. 5, students from Wayne, Oakland and Macomb counties came to MCC and saw demonstrations of STEAM knowledge being used.

The demonstrations were put on by the event's sponsors, Patrick said. They included GM, Ford, FCA, Continental Magna, Siemens and Kuka.

On the evening Dec. 6, students could return to the campus with their parents for a Q&A.

"The idea is to show students how studying STEAM subjects can lead to a very successful career," Patrick said. "The Q&A session helps educate the parents."

"This is an exciting event that we look forward to putting on every year," said Joe Petrosky,

dean of Engineering at MCC. "It really charges me up to see students learning and having fun at the same time. The first day is all about student interaction and hands-on demonstrations by our sponsors. The second day's evening gathering is more about students and their parents learning the pathways to STEAM careers, learning what classes to take and what companies are looking for in employees."

The demonstrations put on by Ford, FCA and GM represented a sort of "soup to nuts" showing of how automotive designs go from the imagination to an actual full-size three-dimensional clay representation of an automotive design.

Alexander Tannen, an exterior designer for Jeep, showed students how to use Photoshop software to create a sketch of an automotive design on a computer. In earlier times this sketch might be done using a pencil and paper.

"I really enjoy teaching kids how sketch electronically," Tannen said. "We now have technology that translates sketches directly into electronic representations. The students usually haven't seen this type of technology on their home computers and are very interested in how it

works. They are fascinated by the process."

Michael Smith, a Design recruiting and talent manager at Ford, showed students how to

use 3D rendering software to create three-dimensional renderings of automotive designs.

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Local students got their hands dirty at GM's design demonstration.

## GM, Ford and FCA Gather STEAM at MCC Annual Event

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One of the students he called up to actually use the 3D software was Peter Wojcik, a freshman at Lakeview High School in St. Clair Shores.

Wojcik put on a special 3D headset and was given a hand-held control. By using this control, Wojcik was able to "sketch" a 3D rendering of what he "drew" in the air. This sketch appeared on a screen.

Jordan Beckley, a Ford digital design instructor, showed Wojcik how to use the hand control to create the appearance of texture on what he drew and how to manipulate the control to create actual drawings on the screen by manipulating the controller in the air as if he was drawing on an invisible board.

"I have to say this is a pretty good demonstration," Wojcik said. "This is the first time I've

ever used Virtual Reality (VR) 3D tech. The biggest surprise was that I was able to go into the rendering and see the thing I drew using the headset. It looked like what I drew was right in front of me. Very cool."

GM's demonstration showed how designers used renderings in the computer to create clay scale models and then actual full-sized sculptures made of clay.

Eric Louton works at GM's de-

sign building in the Tech Center in Warren and has been with the company for 30 years.

Louton said that when he talks with students, the question that most comes up is where is this 3D technology going, and how it affects design work.

"I went to school here at MCC 30 years ago and got a job right away with GM and have been with the company ever since," Louton said. "I currently work

as a group leader in the company's Design Center doing sculpting. What we are showing students is that even in this computer age with all this wonderful 3D technology, there is still a need for literal hands-on design talent. We still need surface product engineers. It's fun to show the students how we take computer designs and render them in clay, first in scale model, then full-size," Louton concluded.



Students see how FCA exterior designer Alexander Tannen uses computers to create vehicle designs.



Student Peter Wojcik uses Virtual Reality gear to create a 3D drawing.