GM Engineer Piques Fifth Graders' Interest in Math

by Phil Foley Special to Tech Center News

DRYDEN – Much has changed since General Motors fell victim to the second largest industrial bankruptcy in U.S. history nearly three years ago.

Some things, however, like GM's commitment to the future and children have not changed.

When she heard the bankruptcy announcement, Kim Hudson, a fifth grade science teacher at Dryden Elementary School in southern Lapeer County, wondered if she'd see Wendy Lange again after bringing SAE's A World in Motion (AWIM) program to the school for two years.

But Lange, an engineer at the GM Tech Center in Warren. came back and has come back every year since then.

"There's a very different culture at GM," observed Lange. "We've seen a lot of change." Still, she said GM people find time to give back to their communities.

For the past five weeks, Lange has been spending an hour a week with Hudson's and Courtney Gleason's fifth grade students, introducing them to the world of math and science outside elementary school textbooks.

Lange, who joined GM as a chemical engineer, has worked on a wide variety of projects, designing including the bumper for the C-5 Corvette.

"That was a fun job," she said. Currently, she's the manager for PLM systems.

Hudson said the program is a "good addition" to Dryden's science program. "They're able to supply us with things we can't," she said,

"Anytime we can partner the school with the community, we want to do that," said Hudson. Dryden is Lapeer County's smallest school district with 1,800 students spread out over

110 square miles. Lange, a 25-year GM veteran, first brought AWIM to Dryden when her son, Jacob, was a fifth grader himself.

While Jacob's now a freshman at Dryden High School and his sister, Lauren, is a senior, Lange keeps coming back because "it's fun and I enjoy doing it."

Besides, she said, "These are our future engineers.'

Gleason, who's in her third year teaching science at the school, said she's "thankful" to have Lange come in. She said it 'really works out well" with the school's forces in motion unit.

She said the students are split into teams of four and they learn about completing an investigation by collecting and analyzing data.

"It's surprising how well they work together," said Gleason.

Unlike some other science programs, AWIM has a little twist. Students pretend to be hired by a toy company and at the end of their program they make a sales presentation for their project.

Lange said she helps students learn about math and science by building a balloonpowered car and then racing in with awards for their work.

a four-meter drag race.

to help in the classroom across the U.S.

Fifth grader Laura Ellis said

She'll be back this week to her brother's team won last listen to the team's sales pres- year and now he wants to be entation and to present them an engineer.

three-year terms end. They

silent on the question. Some lo-

cal workers say they could be

packed to leave in 20 minutes

against Lansing. But, they fig-

ure, why should they tie up a

job in a place that doesn't be-

long to them when there are

plenty of Michiganders who

would line up at the mere

thought of a "now hiring" sign

and spend their paychecks

They don't have anything

if it happens.

PHOTO: PHIL FOLEY

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Jodie Adams, a member of the JKCT Toys team at Dryden Elementary School, shows off her team's effort. GM engineer and Dryden resident Wendy Lange has spent the last five weeks helping 5th graders at the school learn how math and science are important to industry as well as to future high-paying careers.

Chevy Volt Saves Enough Gas to Fill a Supertanker

DETROIT – Here's a domestic auto industry news item that should make OPEC oil barons blanche.

Chevrolet Volt owners collectively have saved a supertanker of gasoline since the electric car with extended range went on sale, compiling 40 million miles on electricity and avoiding the use of more than 2.1 million gallons of gasoline

With each click of the odometer, Chevrolet Volt owners are measuring their contribution to reducing America's dependence on foreign oil and to preserving the environment," said Cristi Landy, Chevrolet Volt marketing director.

Volt owners are also saving at the fuel pump with more than \$8 million in combined savings.

Chevrolet recently introduced a rolling ticker on its website that showcases realtime daily driving statistics for Volt owners based on OnStar data

Results in total number of miles driven, electric miles driven and gallons of gas saved are viewable.

As of today, 40 million total electric miles (EV) have been driven, which is equivalent to:

16,373 trips across the United States (2,443 miles from New York to Los Angeles) • 1,606 trips around the

Earth (24,901 miles each)



Since the Chevy Volt went on the market in December, 2010, Volt owners have saved 2.1 million gallons of gasoline by running on battery only – saving the equivalent of the delivery of the volume of a typical oil supertanker.

pump (based on \$3.80/gallon of gas)

• 387 U.S. semi-truck tankers of gas saved (5,500 gallons of gas each)

• One supertanker of gas saved (2 million gallons of gas) "Our Volt owners are driving

the vehicle exactly as the car was designed," Landy said.

"Sixty percent of the time our owners are driving electric, but the extended range is providing additional miles when they need it. This shows that you don't have to change your daily driving habits to drive the Volt.'

The Volt has a total driving range of up to 379 miles, based on EPA estimates. For the first 35 miles, the Volt can drive gas and tailpipe-emissions free using a full charge of electricity stored in its 16-kWh lithiumion battery.

• 167 trips to the Moon When the Volt's battery runs

Transplanted GM Worker 'Visits' Home Biweekly By LINDSAY VANHULLE wide, return home before their Acadia and the Traverse.

GM Tech Center engineer Wendy Lange records a team's finish

during drag race competition at Dryden Elementary School in

Lapeer County recently. Lange is just one of more than 20,000 en-

gineers, scientists and tech professionals who have volunteered

Lansing State Journal

DELTA TOWNSHIP, Mich. (AP) - Scott Mitchell drives 600 miles so he can mow the lawn.

He's only half-kidding. Every other weekend, he and his roommate pack the car and drive straight to Tennessee at the end of their graveyard shift at General Motors Co.'s Lansing Delta Township assembly plant. They share the driving so the other can nap.

They're home for about a day-and-a-half before it's back to Michigan and back to work.

"You get home, you fix the stuff that's got to be fixed, you change your oil, you mow the lawn - you know, you fix the hole in the wall or whatever and then you're leaving again," said Mitchell, 47, who will mark 25 years with GM in June. "You're a visitor in your own house, quite honestly.³

John Peila, Mitchell's roommate, only sees his wife and granddaughter on these short trips. Mindy Lara logs onto the Internet to talk to her husband every day before she starts her overnight shift.

These are the "transplants" · GM workers represented by the United Auto Workers union who headed north two years ago when the Detroit carmaker shut down part of its Spring Hill. Tenn., operation and shifted production of the Chevrolet Traverse to the Delta plant, adding a third shift of about 1,000 workers in the process. They are among the 560 Gen-

eral Motors employees still

nessee.

For some of them, the choice to take the carmaker up on a three-year transfer wasn't much of a choice at all: Anything to stay employed. Many have worked for GM for decades and are among the set of UAW-represented workers whose pay averages about \$29 per hour. Add in benefits and the relocation package GM offered them - \$30,000 and the ability to retain their seniority toward their pensions - and transferring for many appeared to be the best decision.

But it also has meant a rad-

Spring Hill assembly will reopen as engine plant continues to run

here?

ical departure from their daily lives, geographically and figuratively, as they adapt to communicating with their families via cellphone or computer, paying rent along with their mortgages on houses they own in Tennessee and missing family birthdays and other milestone events.

GM plans to reopen the manufacturing plant in Spring Hill, initially to make the Chevrolet Equinox small crossover later this year. A company labor executive last fall said the idled plant could see an initial infusion of \$62 million and 685 workers. Spring Hill also could land new midsize vehicles for the 2015 model year, which would boost production there by as many as 1,200 jobs and

Mitchell and his wife are native Michiganders. Mitchell was born in Battle Creek, Dana in Owosso. For years, he'd worked at GM's Flint Truck and Bus before he was laid off and moved to Tennessee.

For the first several years, Dana wanted out. Take me home, she'd say. In the late 1990s, Mitchell said, GM again offered jobs in Flint. He told his wife.

"She said, 'I ain't leaving," he recalls. "I said, 'Well, when did this happen?"

By then, the couple and their daughters, Brooke and Kirsten, were settled in Bon Aqua, a Nashville suburb about an was decided. Tennessee was the clock.

where they would retire.

As soon as he accepted a redon't know if it's true. The location offer, he and Dana company and the union are

didn't talk much about Michigan. So long as it wasn't part of conversation, it didn't have to be real. Mitchell left early one morn-

ing in January 2010, his birthday. He opened the car door and drove away. And Dana fell apart.

"It's hard to prepare for it," Dana says. "I think I was hoping it would just work its way out. It's hard when you've been together 25 years and haven't been apart maybe one or two days ever, and then to just be told you're going to be ripped apart?

"I thought it wasn't going to be as hard, but it is hard. It's extremely hard."

They talk every day. Sometimes, she says, the conversation grows quiet, as though there's nothing to say. Eventually, the topic shifts back to Spring Hill and the reopening of the GM plant. Is there news?

The Traverse started rolling off the Lansing Delta Township assembly line as part of GM's recovery plan after its quick trip through bankruptcy in 2009 to consolidate its operations and improve efficiency. Some of that plan involved shutting down and selling off brands - it jettisoned the Pontiac. Saturn. Hummer and Saab nameplates - closing plants and turning the remaining facilities into three-shift operahour's drive from Spring Hill. It tions running basically around

Now, nearly six years after When the plant idled, the Delta plant opened in late Mitchell said he planned to 2006, 3,123 hourly and 257 take the first transfer offer that salaried workers have jobs at came up. And Lansing's Delta the facility, boosted partly by Township plant needed people a third shift added in 2010 to build the popular crossovers when the Traverse went into

(238.657 miles each)

have been saved, which is equivalent to:

• 50,714 barrels of gas saved

low, a gas-powered engine/gen-Also, 2,130,000 gallons of gas erator seamlessly operates to extend the driving range another 344 miles on a full tank. Typically, Volt owners drive

(42 gallons of gas per barrel) an average of 900 miles be-• \$8 million saved at the gas tween fill-ups at the gas station.

living in Lansing who have spent the past two years living, in essence, double lives: fulltime worker at the Lansing Delta Township assembly plant, part-time family member - in person, at least - in Ten\$183 million.

They hear rumblings now, the Tennessee workers, that the UAW and GM are trying to work out a deal to let some Spring Hill transfers, who are spread out in factories nation-

- the Buick Enclave, the GMC full production locally.

