



PHOTO: CHRISTINE SNYDER

Michigan students at one of Ford's interactive displays during Education Day at the North American International Auto Show.

Snyder Guides Students On Entrepreneurial Tour

by Christine Snyder
Staff Reporter
Tech Center News

More than 4,000 Michigan students got a get-out-of-school-free card Jan. 19 to attend the North American International Auto Show sixth annual Education Day.

Students had several tours to choose from that focused on different career paths from engineering to public relations.

Those who chose the tour, "Unleash Your Inner Entrepreneur," had a surprise guide – Governor Rick Snyder.

Before the tour, Gov. Snyder spoke about entrepreneurship in his opening remarks.

He gave many examples of successful entrepreneurs, including the founder of Gateway, where Snyder was a lead executive for years.

"Not all (entrepreneurs) will be billionaires, but that doesn't mean they can't be extremely successful being an entrepreneur," said Gov. Snyder, who then gave examples of more modestly successful Michigan entrepreneurs.

"One thing about entrepreneurship is it's hard work and you don't always succeed," said Gov. Snyder, who gave Henry Ford as an example of persistence.

"It is recognized he (Henry Ford) changed the entire world, but it's not always recognized that the Ford Motor Company we know today is the third Ford Motor Company. The first two failed."

Gov. Snyder said entrepreneurship consists of taking an idea and making it real for

other people. He said the NAIAS was full of entrepreneurial innovations.

"Many of the ideas you will see today are hi-tech," said Gov. Snyder. "It doesn't have to be hi-tech."

Gov. Snyder gave some low-tech examples, such as a successful bread company and also let students know that if they don't have that entrepreneurial skill set, they can still be involved in entrepreneurial endeavors.

"One of the things we don't talk about much is creating the team around the (entrepreneurs)," said Gov. Snyder, who added that he wasn't the "idea" person for Gateway, but was part of the company's team. "I was good at accounting and finance. If you don't have that entrepreneurial skill set, you can still be part (of the team)."

Baron Meade, chairman of the NAIAS, said there is a "whole bunch" of talent needs in the automotive industry. Meade emphasized that the industry is worldwide and is still a large and important industry for the state.

"In North America, we sold between 12 and 13 million vehicles, but worldwide, that is about 70 million," said Meade. "We need bright, fresh minds who are passionate about this industry."

Gov. Snyder said Michigan has been down for a long time, but is on its way back. "Some of that (comeback) is what you will see today... great innovative ideas."

"We want to make Michigan the best place to take those ideas."

Chevrolet Volt Offers Best Handling at Drive Event

by Stefanie Carano
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Detroit Auto Scene

With several of tomorrow's hottest test cars available at the North American International Auto Show, the opportunity to take a test drive seemed too tempting to pass up.

After all, how often are the Ford Fusion Hybrid, the Chevrolet Volt, the Mercedes F-Cell and other such vehicles all together in one place, waiting with front doors open for interested parties to take a spin?

This reporter didn't hesitate to test them all out and by the time I was finished, I tried to determine which vehicle might be the best offer in terms of fuel economy and handling.

I test drove the Volt first, one of the newest electric vehicles to come into production, though not quite classified as a "hybrid" per se.

Getting into the driver's seat, the car had a more luxurious feel than your typical alternative propulsion car, sporting seats wrapped in optional leather trim and a smooth, seamless center stack with a sculpted shifter.

And the handling was great, driving the vehicle was smooth sailing, even in electric mode. The one drawback was that the electronic gauge in the driver's screen meant to indicate driving efficiency and amount of charge, can be difficult to discern. Since driv-

ers are trying to keep their eyes on the road and can only glance down at the gauge, there seems to be a need for it to be more comprehensive.

Next, the Ford Fusion Hybrid continues to be a vehicle I really enjoy, a seemingly all-purpose, practical vehicle with a hybrid capability. Nothing about its looks classifies it as a hybrid, which I like. Its Smart Gauge is very easy to understand, providing an easy reference for driving efficiency. It offers a good driving experience along with the benefits of a lower emission, fuel efficient car.

After that, I tested out the Mercedes F-Cell, a hybrid-hydrogen vehicle in limited production. This particular car is rarely discussed when hybrids and EVs are the topic of conversation in Detroit, but Mercedes-Benz has developed this as an interesting test car all the same.

The drivetrain on the F-Cell is electric but it gets its electricity from a hydrogen fuel cell so there is no internal combustion engine.

In the F-Cell, drivers can hear the "whizz" and buzzing of the fuel cell as it warms up. The noise increases and decreases as the vehicle moves.

As a hybrid-hydrogen car, the F-Cell's only tailpipe emission is water. While the buzzing sounds of the cell are not very loud, they are definitely audible.

The car goes about 240-250 miles per charge, can be recharged from the hydrogen

in about three minutes, and its only emission is water, as noted.

A recorder in the glove box of the vehicle records fuel cell information and each fuel cell is expected to last about 8-10 years.

This was a nice vehicle to drive, though the noise was a little distracting.

It should be mentioned that the F-Cell is currently being sold as a lease-only program at \$849 per month, which includes collision insurance, as well as all the hydrogen for the mileage of the lease.

Next was the BYD F3DM, "Dual Mode electric vehicle," or an electric vehicle and hybrid-electric vehicle combined. Confused? This means that the vehicle can be set to drive only in electric mode without enacting an internal combustion engine or it can act as a hybrid, kicking in the engine at about 60 miles.

The vehicle has a great torque in electric mode, though this of course decreases the battery capacity and in all-electric mode drivers would generally try to conserve as much as they can. The vehicle has two batteries from which it can receive a charge – a solar battery panel on the roof and a lithium iron phosphate battery.

BYD, a Chinese automaker, is not currently considering producing the vehicle for the North American market but said there are considerations to sell another vehicle like it in the future. Current starting price for the vehicle is about \$22,000 USD.

Like most other hybrids, the F3DM has regenerative braking.

Conclusion? Of those tested the Volt demonstrated the best drive in terms of handling and fuel economy.



Several advanced propulsion vehicles were available for the media to test drive at the North American International Auto Show, including the Chevrolet Volt.

Chrysler Future 'Depends on' Two New Minivans

WINDSOR, Ont. – Joined by Chrysler Group CEO Sergio Marchionne, government officials and CAW leadership, employees at the Windsor Assembly Plant (WAP) last week celebrated the launch of production of the new 2011 Dodge Grand Caravan and Chrysler Town & Country.

The vehicles are two of the 16 new or significantly refreshed products the automaker debuted last year.

Marchionne and Chrysler Canada President and CEO Reid Bigland, along with Ontario Minister of Economic Development and Trade Sandra Pupatello, Ontario Minister of Finance Dwight Duncan, Windsor Mayor Eddie Francis, CAW President Ken Lewenza and other local officials, recognized the importance of the plant, the workforce and the new minivans to the future success of the Company during a ceremony at the plant.

"The new 2011 Dodge Grand Caravan and Chrysler Town & Country remain key parts of our revival plan," Marchionne told more than 1,200 employees in the audience.

"Our collective future is dependent on the success of this plant and these vehicles. We're in this battle together. We must continue to put our trust in each other and make a true, full-faith effort to work together."

Marchionne also reminded employees that it was with the assistance of the federal government of Canada and the Province of Ontario that Chrysler has been given an

opportunity to create a future.

"Chrysler Group owes a deep debt of gratitude to taxpayers in Canada and the U.S. for the loans that enabled a reenergized, restructured company to emerge in June 2009," said Marchionne. "We recognize we have a moral responsibility to fulfill our promises, justify these investments and pay back every penny that was loaned to us."

In preparation for the launch of the new 2011 Dodge Grand Caravan and Chrysler Town & Country, the automaker has invested more than \$1.4 billion USD since 2008 for assembly, stamping, material handling and tooling, as well as improvements to the Windsor paint shop.

Windsor is currently the only Chrysler Group assembly plant that operates on three shifts with more than 4,400 employees.

"This is a proud day for Chrysler Group and the CAW as it launches two new minivans, thereby preserving good manufacturing jobs in Canada," said Lewenza. "Our commitment and effort over more than 25 years have played an important role in the success of the Dodge Grand Caravan and Chrysler Town & Country."

Chrysler Canada has played a vital role in helping the automaker meet the goals outlined in November 2009, according to a company statement.

As it begins its 86th year, Chrysler Canada reported a sales increase of 26 percent in 2010, achieving the highest year-over-year sales growth in Chrysler Canada history and its 13th consecutive month of year-over-year sales increases.

As a result, Chrysler Canada gained two percentage points of share – more than any other manufacturer – increasing its market share to 13 percent.

Annual sales records were reported for the Dodge Grand Caravan and Ram pickup truck, with the Dodge Journey being Canada's best-selling crossover.

Additionally, the Dodge Grand Caravan was one of the country's top five best-selling vehicles.

Altogether, Chrysler's minivan sales in Canada grew by 37 percent in 2010. In fact, Chrysler Canada claimed 74 percent of the Canadian minivan market.

Production at the Windsor Assembly Plant also rose 62 percent last year and, overall, Chrysler's Canadian production rose 51 percent, making it the number two manufacturer in the country in 2010.

In preparation for the launch of the new 2011 Dodge Grand Caravan and Chrysler



The 2011 Dodge Grand Caravan minivan, which is produced at Chrysler's Windsor Assembly Plant.

Town & Country, employees at WAP began transforming the facility as part of WCM, an extensive and thorough process to restore all facilities to their original and maximum functionality.

The rollout of WCM began with putting more than 4,400 employees through more than 30,000 hours of training focused on the principles of WCM and how to identify and attack waste and losses on the line.

As a result, employees have become more engaged with their work and submitted more than 30,000 suggestions on how to improve the processes at the plant. In fact, more than 3,000 employees at WAP have been involved in suggestions and continuous improvement activities in 2010.

Additionally, WCM has helped eliminate unsafe conditions, with a 52 percent reduction in injury frequencies.

Another area of significant improvement has been the area of autonomous maintenance. Workers take responsibility for cleaning and inspection of equipment in order to eliminate breakdowns. In the body shop, this has resulted in running more than one year without a breakdown due to lack of basic conditions.

In the paint shop, employees restored the 12-year-old robotic sealer application equipment to its original condition. The team then benchmarked an idea from Fiat to incorporate clear plastic coverings to catch small sealer drips to prevent the critical parts of the equipment from getting dirty and thereby, avoiding future breakdowns.

In total, the implementation of WCM resulted in plant savings of more than \$46 million CDN in 2010.

Chrysler invented the modern minivan in 1983 with the Dodge Caravan and Plymouth Voyager. The first luxury minivan, the Chrysler Town & Country, debuted in 1989.

Although other competitors entered the post-1983 minivan market, Chrysler was said to have the edge there if only because their vehicles were built on car chassis and offered car-like handling.



Chrysler Group CEO Sergio Marchionne addresses employees at the Windsor Assembly plant, which has produced more than 8 million minivans since production first began there back in 1983.

Competitors' minivans tended to be built on truck platforms and handled, like, well, trucks.

Chrysler's introduction and maintenance of the minivan market back during the Lee Iacocca era helped the automaker enjoy dominance in the segment and minivans have been an image leader for the Auburn Hills carmaker for going on almost 30 years now. So the disposition of the Windsor Assembly Plant is important not only to Chrysler's past – but to its future product lineup as well.

Meanwhile, the 2011 Dodge Grand Caravan and Chrysler Town & Country both benefit from the all-new 3.6-liter Pentastar V6 engine, which provides best-in-class horsepower and more torque, with up to 2 miles per gallon improved fuel economy.

Both feature a new fuel-economizer mode that helps maximize fuel efficiency.

The minivan launch announcement in Windsor was well attended by Michigan and Ontario media alike.

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