




Educator News from the Caterpillar Visitors Center

IN THE YELLOW PAINT

Sept / Oct 2016

New this Fall

-  New equipment arrived on our product floor over the summer!
-  Now through November: The “Leo” Exhibit. Allow your students to experience the story not many know of Leo – Caterpillar’s first and longest-serving chairman.
-  Caterpillar brings autonomous trucks into STEM classrooms nationwide with Spark 101 STEM Skills video & complementary lesson plans!
-  Plan a field trip in November or December for an opportunity to see Cat® equipment decked out for the holidays!
-  The Central Illinois Society of Women Engineers is seeking feedback. See page three for more information.
-  Caterpillar’s Mixed Chorus will soon celebrate 75 years!

Things to know

Our product floor is always a hot spot during field trips—students can get up close and learn more about featured products. Come see what rolled in over the summer!



323F Hydraulic Excavator
D6T Track Type Tractor
236D Skid Steer Loader
12M3 Motor Grader
300.9 Mini Hex



Leo



Teach your students about innovation. Now through November, get an in-depth look into the iron and imagination of one of the greatest innovators of our time. [Click here to learn more.](#)

Caterpillar brings autonomous trucks into STEM classrooms nationwide with Spark 101 STEM Skills video & complimentary lesson plans.

Teachers across the nation and right here in Central Illinois can now engage students in authentic problem solving using the science, technology, engineering and math (STEM) skills required to design self-driving vehicles for harsh environments.

While students might think that the first self-driving vehicles will be designed by the automotive or consumer technology industries, engineers from Caterpillar Inc., the world's largest heavy equipment manufacturer, have already deployed high-tech, autonomous haul trucks to improve safety and productivity in mines around the world.



With thousands of engineers and technologists innovating solutions for Caterpillar's customers, STEM graduates are critical partners in the company's mission now and in the future. That's why Caterpillar supports both national and international STEM initiatives—to inspire the next generation of game-changing innovators.

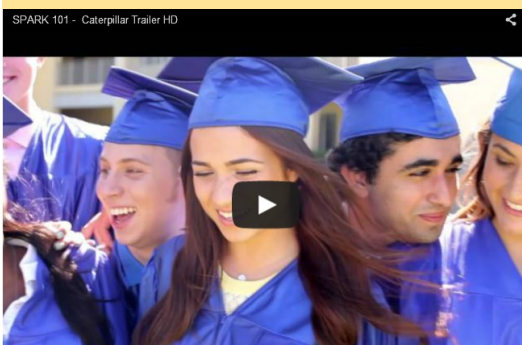
Caterpillar partnered with Spark 101 for a unique solution to engaging students in STEM coursework and future potential careers. Spark 101 STEM skills videos, presented by employers like Caterpillar, use an online interactive video format to let students work on real challenges faced by professionals in business, government, nonprofit and academic institutions. The 10-minute classroom videos—co-developed by educators, employers and Spark 101 design experts—engage students in authentic STEM problem solving, aligned to curriculum and educational standards for easy classroom integration.

In [Caterpillar's challenge](#), students are asked to use their problem solving and math skills to choose the appropriate sensor systems to enable autonomous haul trucks to safely navigate the harsh environment of a mining site.

“Developing a STEM challenge with Spark 101 lets us build our talent pathway by promoting STEM careers to thousands of students worldwide,” said Michelle Unser, Caterpillar's lead of Engineering STEM Outreach. “This way, we address the future needs of our organization while also helping learners—in our communities and beyond—launch their identities as STEM professionals.”

Thanks to the support of employers like Caterpillar, secondary teachers can access more than 50 free Spark 101 STEM skills videos and curriculum-aligned teaching materials online at www.spark101.org.

“I love watching my students work through the challenges, using their knowledge in ways that prepare them for real life,” said Susan Patterson, a high school math teacher in Texas and Spark 101 Teaching Fellow who was involved in creating Caterpillar's challenge. “Spark 101 gives me the resources to bring deeper learning into my classroom—helping me keep my students motivated to master essential math skills like linear equations.”



To see Caterpillar's full challenge video and log in for complementary lesson plans, visit:

<http://www.spark101.org/video/navigating-the-future-of-autonomous-vehicles/>.

About Spark 101: Spark 101 is a program of the 114th Partnership, a national nonprofit that helps students navigate education and career pathways. By connecting classwork to professional pathways, the organization will equip one million students with the knowledge they need to connect their personal passions to high-opportunity careers.

*Aspire.
Advance.
Achieve.*



Let Your Voice Be Heard!

The Advocacy Committee of the **Central Illinois Society of Women Engineers (SWE) Section** recently launched a survey to help them prioritize their efforts and leadership for advocacy in Central Illinois! If you believe in the importance of diversity in engineering and technology, please take a few minutes to complete the survey by Friday, October 14.

Click [here](#) to take the survey.

Did you know Caterpillar has a chorus?

75 Years and Going Strong: How the Caterpillar Employees Mixed Chorus Started

The Caterpillar Employees Mixed Chorus was organized on October 29, 1941, making it the oldest employee musical activity of its kind in the world. It was the brainchild of O.G. Fry, who worked in the parts department at the East Peoria Plant. Julian Mills of the advertising department served as director during organizational rehearsals.

The first meeting produced approximately 30 interested employees. Ralph Maxwell, of the purchasing department, became the accompanist. Maxwell had been a professional organist before coming to Caterpillar and was directing a choir in a church in East Peoria. He not only had the musical background needed to spark the new Chorus but had a theatrical background to help in formation of the future cast of Chorus ventures. Maxwell became the Mixed Chorus's first permanent director in December, 1941, and directed the group in their first public appearance, playing in a Christmas program with the Caterpillar Band in 1941.

In fall of 1942, the Chorus presented its first musical production called *South of Sonora*. It ran four nights at the Shrine Mosque in Peoria – a venue that was used for many shows to follow. The show was made possible through the allocation of funds by the Caterpillar Employees' Activities Association, which raised money through profits accrued in vending machines throughout the plant.

The first show was a success and tickets sold out to Caterpillar employees and their families. Caterpillar Chairman LB Neumiller and his family attended the show. Later shows were also made available to the general public.

When you consider the number of people involved in each show (as cast, crew and audience) and then multiply that by 75, you get some idea of the vast outreach of this chorus has had, not just at Caterpillar, but the greater Peoria community as well.

From the "Sound of Music" to "Seussical" - the Chorus resume is diverse. Coming this December, we will be honoring 75 years of the Mixed Chorus in a new exhibit at the Caterpillar Visitors Center called "It Plays in Peoria: The Caterpillar Employees Mixed Chorus."



Watch for more details in the November / December Newsletter!

Book a holiday field trip to the Caterpillar Visitors Center



Starting November 3, the Cat® motor grader on our product floor will be decked out with lights and decor - the perfect photo op for your class!

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