

THE SPOTLIGHT



**Collins Career
Technical Center's
Successful Heavy
Equipment Operator
Training Program
Continues to Grow**



CAT[®] SIMULATORS



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The New and Improved SimScholars™ Curriculum has Launched!





Dear Spotlight Readers

It's that time of year again when we share our clients' success stories in The Spotlight, our semi-annual digital digest. As you read their stories, we hope you will see the many benefits of training on Cat® Simulators systems and understand our unwavering commitment to our customers' successes.

In this year's first issue, we are thrilled to showcase the remarkable achievements of two of our clients: Collins Career Technical Center and the Lowell Correctional Center. Both are making significant strides in training students to operate heavy equipment using our Cat Simulators systems. The incarcerated women at the Lowell Correctional Center in Ocala, Fla., are gaining renewed hope as they prepare for the day they leave the Center and return to society by learning to operate Excavators, Dozers and Compact Track Loaders. The Collins Career Technical Center in Chesapeake, Ohio, is expanding its program, adding two more Cat Simulators systems, the Backhoe Loader and Articulated Truck. Their dedication and success are truly inspiring.

This issue also features the Articulated Truck with two infographics: Operator Safety Tips and

Maintenance Tips for Maximum Uptime. Both will help remind operators how to operate Articulated Trucks properly and safely.

We are excited to announce the launch of our new and improved SimScholars™ Curriculum online Learning Management System (LMS). The new SimScholars LMS, a one-to-one match with Cat Simulators exercises, is now even more engaging with improvements such as animated graphics, clickable interactions and more videos. We're especially proud of the benefits instructors will experience with our reformatted Learner Sim Guides, improved time-saving functionality, new learner progress tracking dashboard and more. We can't wait for you to explore these exciting features.

I hope you enjoy this issue and have a wonderful summer. We are grateful for your continued support and look forward to sharing more client success stories and exciting launches with you in the future.

Lara Aaron
*CEO and President
Simformation™, LLC*



Incarcerated Women at Lowell Correctional Institution Gain Hope Through Heavy Equipment Operator Program

“Can I do this? I’ve never even stood next to an Excavator or Dozer, let alone run one,” she thought. With a mix of nerves and determination, she walked through the classroom door and made her way to her seat. She couldn’t believe she had signed up for the Heavy Equipment Operator program. She was sure this would be one of the most challenging things she’d ever done in her life. She had made some bad decisions before. Was this another one? She hoped not.

Her determination was stronger than her doubts. “I can do this. I WANT to do this,” she said out loud. Seeing other women inmates around her nodding in agreement, she knew she was ready. She was ready to start preparing for the day she would be released and the career she hoped would await her after she learned how to operate heavy equipment.

In July 2023, the Florida Department of Corrections (FDC), in partnership with the Florida Foundation for Correctional Excellence (FFCE), expanded its Heavy Equipment Operator (HEO) program at the Lowell Correctional Institution in Ocala, Fla., to include female inmates to help reintegrate them back into society. Part of this expansion included adding Cat® Simulator systems to train the women how to operate Excavators, Dozers and Compact Track Loaders.

However, the women enrolled in the program are not just learning a skill; they are gaining renewed hope for their future beyond prison walls. They are learning the skills needed to operate heavy equipment effectively and safely—skills that could potentially transform their lives.

“It’s approximately a 10-month program, and we usually have about 20 students enrolled at a time,” said Adam Ryalls, Florida Department of Corrections, Education Technology Coordinator for Region Three. “It’s full-time, five days a week, six hours a day.”

“We have one instructor teaching the class who lectures part of the day, and then the women are on simulators the other part of the day,” said Ryalls, who explained that the course is an open enrollment model. “The course is structured so every woman, regardless of their skill level, can learn in the program.”

Ryalls explained that there are no hard-set requirements regarding who can participate. However, they try to prioritize the women as much as possible regarding their release date and behavior.



Watching how easily they transition to the actual machine is amazing. It is 100 percent easier for them because of the authentic Cat® controls. One of the things they say right away when they sit down in the excavator is, ‘This is the same as I’ve been doing on the simulator.’

Easy Transition from Cat Simulators to Actual Excavators

After the women complete at least 32 hours of simulator training, they can experience hands-on training on actual excavators thanks to a partnership with the Ring Power Corporation, a Caterpillar dealership, which has donated an excavator to the program.

“We’ve had great feedback from the women in the program. The women have loved being able to use a real machine.” Ryalls continued, “Watching how easily they transition to the actual machine is amazing. It is 100 percent easier for them because of the authentic Cat® controls. One of the things they say right away when they sit down in the excavator is, ‘This is the same as I’ve been doing on the simulator.’”

Florida Department of Corrections, Region 3 CTE Coordinator Jarrod Mesloh echoed Ryalls. “Every single person who gets involved with this program absolutely loves it. The students adapt amazingly well to it,” said Mesloh, who previously taught both men and women inmates. “The men gravitate

towards operating equipment a bit more naturally. The women are apprehensive and scared at first, but once they get on the simulator, they fall in love with it.”

Recently, the women inmates had another chance to operate a real excavator. “We did this previously, and we’re doing it again,” explained Mesloh. “They’re going to be operating actual machinery. They love it. They love the Cat Simulators. And they love the Cat experience.”

“These women have never run heavy equipment. The only exposure they’ve had is their time on the simulators.” Mesloh continued, “When we put them on an actual Cat excavator with a big pile of dirt that they can play in, they operate the excavator like they have experience—like they’ve done it before. And it’s because of the simulators.”

After completing the 900-hour program, the women earn industry-recognized credentials, including National Center for Construction Education and Research (NCCER) Core, Heavy Equipment Level 1 and 2 certification and an OSHA 10 card.



Life After Release

The program participants range from women who have already served 25 years to some who will remain at Lowell for some time to those who will be going home soon after the class, explained Ryalls.

“Our goal is to get women who are eligible to go to work release in about 10 months or so. They’ll exit this program and go to a work release facility,” said Ryalls. “We have employers who would love to take them on who are located near the work release facility. Then the women can get some on-the-job training while they’re on work release.”

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Grabbing the handrail, she pulled herself into the excavator cab. As she slid into the operator’s seat, she realized she had done it. After 900 hours, she had completed the program. All her doubts were gone, along with her fear of the unknown. She knew this machine. She knew these controls. She had sat in this seat with these same controls in her hands for hours while learning how to operate this machine. And she had practiced what she was about to do countless times. Pulling her shoulders back, she grabbed the controls and confidently told herself, “I’m ready.”



We’re trying to create a pipeline for this industry through this program, from women currently incarcerated to women becoming employees when they’re released.



ARTICULATED TRUCK OPERATOR SAFETY

Use three-points of contact when getting in and out of the truck cab.

Know the truck's width to maintain proper clearances from nearby objects.

Do not exceed rated loads. Distribute loads evenly in the truck body and avoid excessive heavy loading in the front section.

Buckle the seat belt; stay seated while operating controls.

Use caution when ejecting/dumping material as material stuck in the bed and soft ground conditions can cause the truck body to overturn.

Keep windows clean and clear of dust, dirt and other debris that limit visibility.

Avoid sudden steering and/or severe braking actions on slopes or in turns. Do not use excessive speed in turns or on sloping or rough ground.

Never drive along a ditch or excavation too closely due to potential collapse. Always ensure a berm is in place before dumping at a highwall.

Avoid traveling across slopes. When unavoidable, reduce speed.

Start operators on the right path with Cat® Simulators training. Developed with Caterpillar experts, each simulator features the same authentic Cat® controls as found in real machines. Learn and make mistakes in the safety of the virtual environment before getting in the actual truck.





Collins Career Technical Center's Successful Heavy Equipment Operator Training Program Continues to Grow

Since Collins Career Technical Center (CCTC) in Chesapeake, Ohio, launched its adult Heavy Equipment Operator (HEO) training program, it has not looked back. In fact, the program continues to look forward and grow as it has become an important asset and resource to the construction industry in the surrounding area.

In 2021, CCTC's Associate Director, Michael Staton, and Post-Secondary Administrator/Director of Technology, Chris Leese, determined there was a need for heavy equipment operators after completing a needs assessment with local employers and Local Operating Engineers in Ohio, Kentucky and West Virginia.

"We determined there was a great need for operator training to address the future demands of close to 22,000 heavy equipment operators over the next two years," said Staton.

They partnered with Ohio Local 18 Operating Engineers to design the program to align with the Ohio Department of Higher Education while supporting CCTC's mission statement to prepare youth and adults to enter, compete and advance

in an ever-changing work world. Staton explained that he and Leese believed the in-depth HEO training program would be crucial for the Tri-State's future workforce.

Course Structured to Include Simulator Training

The team designed the course to provide adult learners, ages 18-35, with more than just textbooks and in-class instruction. It includes hands-on, in-cab simulator training on four Cat® Simulators systems: the Small Wheel Loader, Motor Grader, Excavator and Dozer that Staton and Leese agree bring a real-world feel to the students' learning experience.

"We wanted the real-world feel. We wanted the articulation. We wanted the movement in the seat. We wanted the vibrations," said Staton. "We wanted the simulators to just feel as much like sitting in the seat and behind the stick as they possibly could. And that's what Cat Simulators offer."

Leese also wanted the program to stand out against other similar adult education programs. “And for us, that was Cat Simulators,” said Leese. “The simulators are the icing on the cake for students wanting to be heavy equipment operators.”

Two years ago, the program added two more Cat Simulators systems, the Backhoe Loader and Articulated Truck. “We purchased new simulators and turned the old ones over to our high school program,” said Staton who explained that CCTC has a high school program located seven miles from the main campus for local high school programs.

“Our program is successful and a large part of it is because of the Cat Simulators. They are as live and real as they can be,” explained Staton. “The success of this program is for our students to be able to get the opportunity while they’re in the classroom for five months to get hands-on experience. It’s twofold. They’re not just sitting in a

classroom. They’re getting hands-on experience, developing muscle memory and skills while they’re on the simulators.”

CCTC’s successful Heavy Equipment Operator (HEO) training program has grown from four Cat Simulators systems to six over the past three years.

Students Easily Transition to Real Machines

Over the past three years, Staton has watched students with five months of classroom instruction and more than 40 hours of hands-on simulator training transition easily from the simulators to real machines on a sports complex jobsite belonging to the Lawrence County Economic Development Corporation. He attributes much of the smooth transition to the simulators’ authentic Cat controls and the course instructor, Mark Norris, who has over 20 years of heavy equipment experience.





Staton explained, “The muscle memory the students gain during the five months of training on the simulators’ controls is the same as when they sit down in the real machine’s seat. And our instructor is tremendous with the students. He passes his experience along to the students and it just adds to their success.”

“We’ve been moving a lot of dirt for the last three years, but we’re moving dirt with a purpose,” said Staton. “We’re not just digging a footer and filling it back in, then next day digging the footer again. We’re moving dirt, loading articulated trucks and dump trucks, operating dozers, excavators and skid steers. We’re building roads. The students are really getting a well-rounded education.”

And the Tri-State area’s construction and heavy equipment industries are filling their employee pipelines with graduates of the program. “More than 80 percent of the program’s graduates are now working in either the Ohio Local 18 Operating Engineers or with larger local contractors,” explained Staton. “The hands-on experience the students gain from the simulators pays off.”



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Maintenance Tips for Maximum Uptime Series: Articulated Truck

Extend the life of Articulated Trucks with proper operation and maintenance. Include a pre-operation machine inspection before every shift. Schedule maintenance checks and follow these tips to achieve maximum uptime for Articulated Trucks.



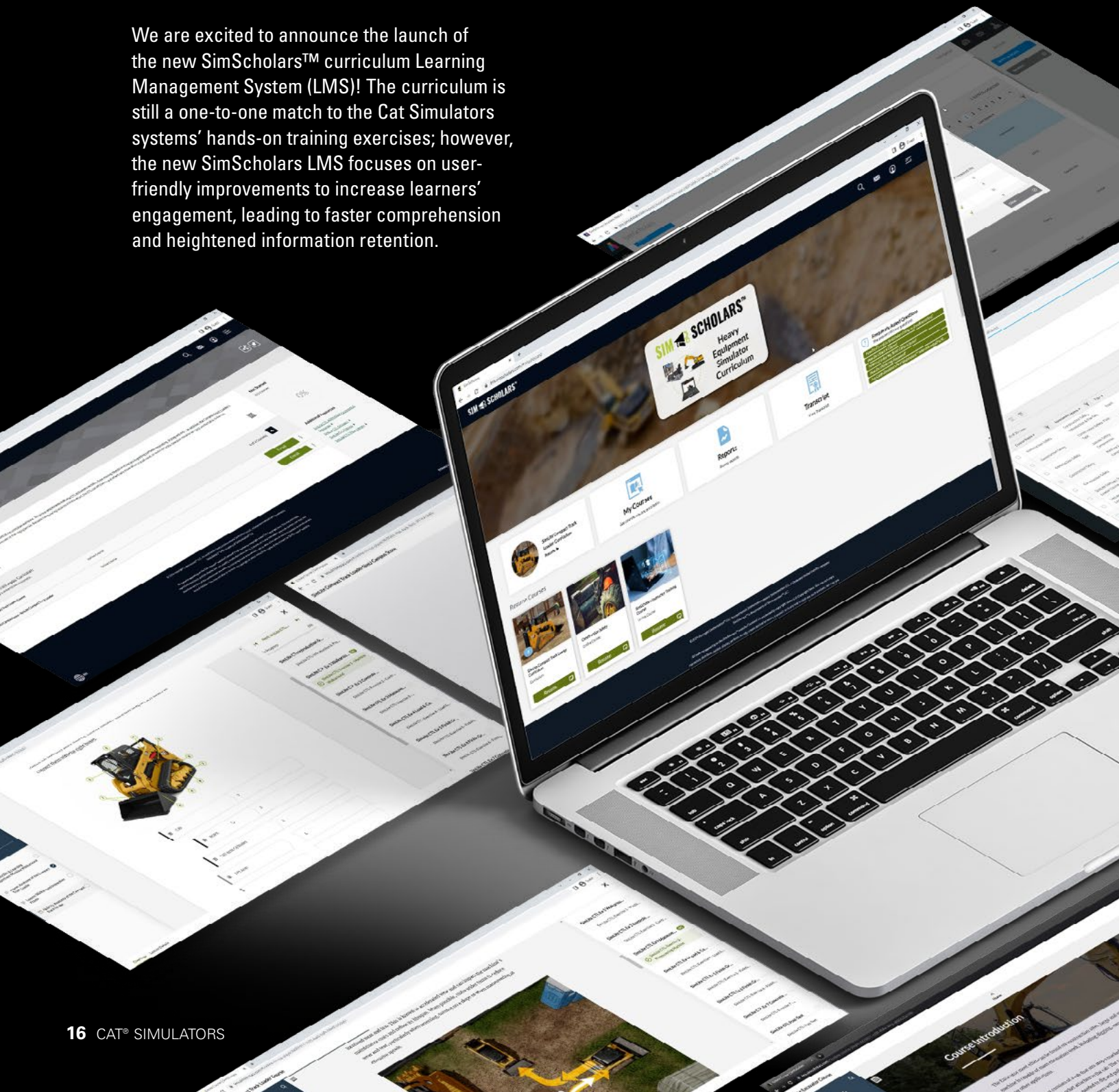
- Do not load the body with oversized material that can become lodged in the body or is unable to clear the end of the body.
- Know the load limits for the truck. Do not overload.
- Keep an eye on brake temperature, especially when choosing gears. If the brake temperature is too high, shift down to a lower gear and slow the machine down.
- Do not use excessive speeds, especially while under load. The additional weight and momentum are harder to stop and can lead to tipping and unplanned maintenance.
- Keep the truck straight and level when loading. These actions are beneficial in several ways:
 - The required effort to pull away is reduced.
 - The possibility of tire damage is reduced.
 - Loading a truck evenly will prevent uneven loading and wear on tires and axles.
- Choose tires to match the terrain and jobsite conditions. Size and width can affect performance and lifespan.

- Do not overload trucks. Disregarding load ratings can affect the life of tires and brake systems.
- When approaching the dump area, slow down before turning to help prevent the front tires from rolling over to the side and causing excessive premature tire wear.
- Check the machine's Operations & Maintenance Manual (OMM) for alignment and grease schedules. The oscillation portion must be readjusted at given intervals to retain the proper specifications or the risk of the oscillation bearings, seals and retention system can be damaged.



The New and Improved SimScholars™ Curriculum has Launched!

We are excited to announce the launch of the new SimScholars™ curriculum Learning Management System (LMS)! The curriculum is still a one-to-one match to the Cat Simulators systems' hands-on training exercises; however, the new SimScholars LMS focuses on user-friendly improvements to increase learners' engagement, leading to faster comprehension and heightened information retention.



Learners have an even more engaging experience with clickable interactions, animated graphics, quiz retakes, and reformatted Learner Sim Guides, which now feature videos and helpful operator tips. Instructors benefit from its time-saving functionality and ease of use, along with an updated Instructor Training Course, user-friendly learner progress tracking, data presentation and more!



TAKE YOUR TRAINING PROGRAM TO THE NEXT LEVEL

*Click the link to watch the video
on the new SimScholars™ Curriculum*

**Contact us to learn more
about how you can integrate
SimScholars curriculum into your
heavy equipment program.**

www.catsimulators.com



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