Virtual Traction Inspection
An Online Tractor Safety Program Teaching Students to Recognize Hazards

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National Ag Safety Database (NASD) History

- National Institute of Occupational Safety and Health (NIOSH) provided funding in October 1993 to develop the first National Ag Safety Database (NASD).

- NASD is a broad-based collection of agricultural safety information contributed by safety professionals and organizations from across the nation, in order to educate workers and managers about occupational hazards associated with agriculture-related injuries, deaths and illnesses.

Did you know?

- Agriculture ranks among the most dangerous occupations in the U.S.

- An average of 113 young adults (ages 16-20) die each year from farm-related incidents, most of which are caused by tractor overturns.

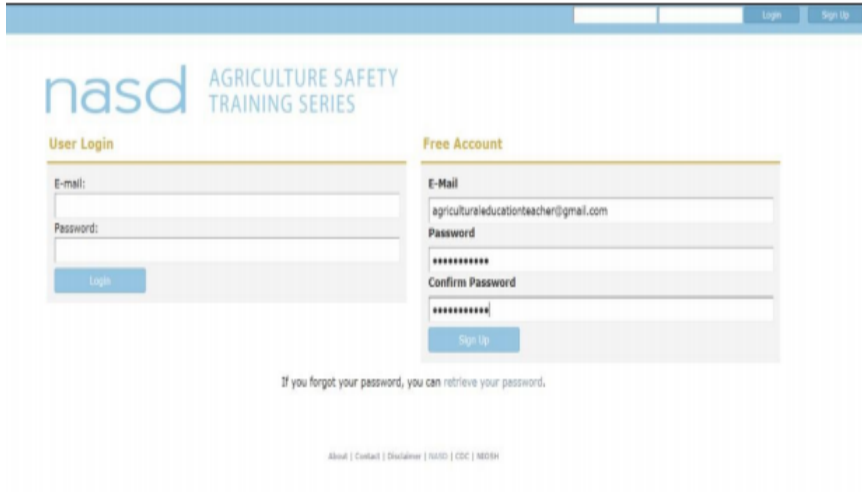- The annual estimated cost of agricultural injuries exceeds $4.5B.

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Virtual Tractor Inspection Walk-Around

- The ***Virtual Tractor Inspection (VTI)*** Walk-Around is a web-based course designed to teach Ag students to rate the safety of various tractor models through an online portal that makes learning fun.

- VTI places students into real-life situations so that they learn to evaluate tractors for safety based on visual information alone, through a medium they are accustomed to using – the internet.
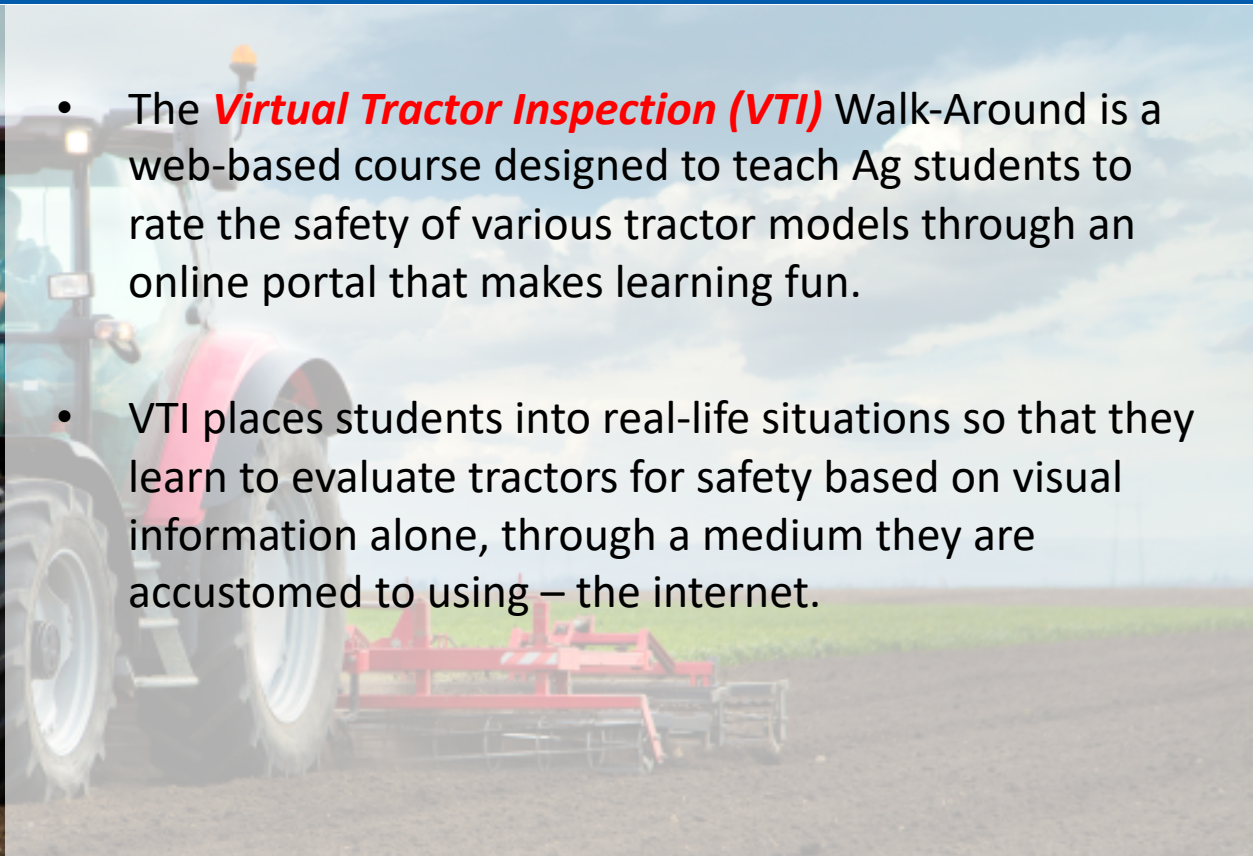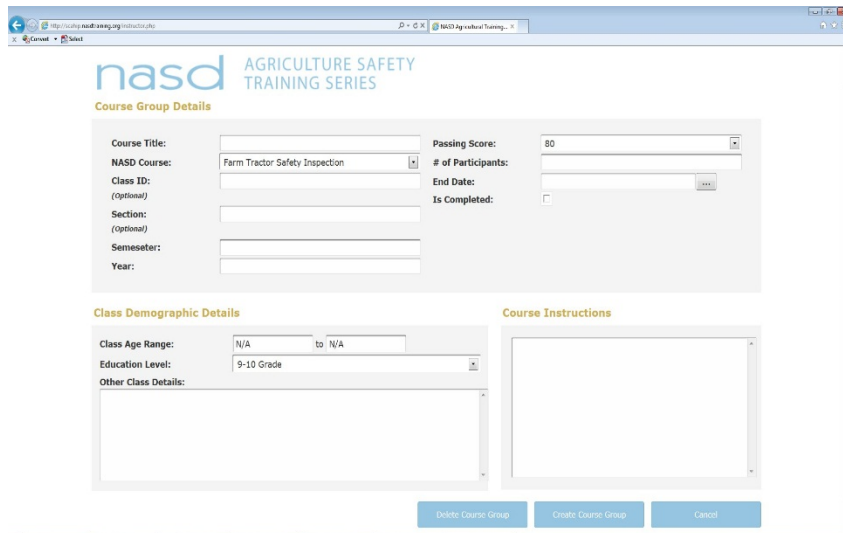
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Instructor Interface

Step 1: Setting Up Your Classes for VTI:

To begin, go to http://scahip.nasdtraining.org/instructor.php and enter your login information or choose the option to set up a new free account.

Step 2: Entering Course Group Information

Each of your classes needs its own course group. To create a course, click on the blue "Create Course Group" button. A form will appear so you can record information, including number of participants, passing score, age range and dates and set the level for mastery (80% and above).

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Step 3: Reviewing Course Group Info

This screen lets you review at the course information again before finalizing. Make any changes by clicking on the blue "Edit Details" button. A link is created for each course you create and you can forward the link to your students

Step 4: Reviewing Your Dashboard

Your dashboard allows you to review your list of classes. You can edit course details or add more courses as needed.
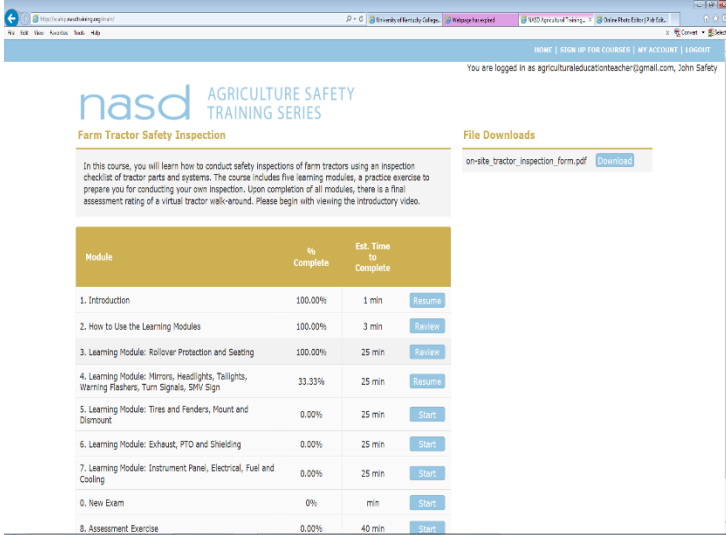
Student Start-up for VTI

After clicking the link, students will need to input their name and click "Submit" to continue. Students will then see a completion screen after they submit their name and will also give them details about what to do next (which you previously entered in the Course Instruction box) and what grade constitutes a passing score.

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Student Start-up for VTI

To begin, students watch a short instructional video and then enter **8** modules in succession that teach them how to evaluate the condition and operational safety of various tractors.
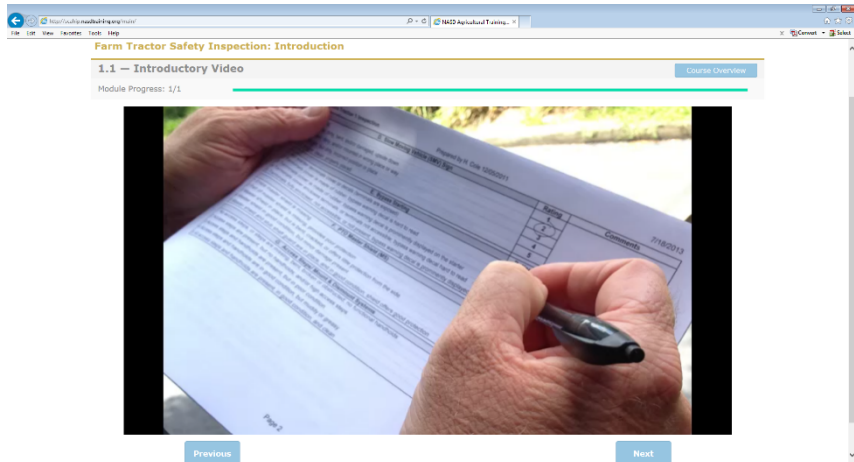
Students determine whether the tractor is in safe operating condition, and receive feedback on their responses.

Next, students can take a practice assessment; complete a virtual tractor walk-around; or perform an onsite tractor assessment developed by their instructor.

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Virtual Walk Around

The final module challenges students to rate a tractor by doing a virtual walk around. Students are also able to download a tractor inspection form in order to rate any tractor, whether at home or at school.

Question Analysis Report

Question	# of answers	% correct	% incorrect
Rollover Protective Structure (ROPS) and ROPS Type	176	10.80%	89.20%
Seatbelt	86	18.60%	81.40%
Tractor Seat	115	9.57%	90.43%
Rear-View Mirror	114	21.05%	78.95%
Headlights and Taillights	82	14.63%	85.37%
Warning Flashers & Turn Signals	52	7.69%	92.31%
Slow Moving Vehicle Emblem (SMV)	111	17.12%	82.88%
Tires & Wheels Front/Rear	110	10.00%	90.00%
Rear Wheel Fenders	136	11.03%	88.97%
Access Steps/ Mount & Dismount Systems	164	4.27%	95.73%
Operator Platform	108	5.56%	94.44%

The Question Analysis report aggregates the answers from an entire class or group of classes in order to understand what students are getting incorrect within the virtual walk around and which items could use more instruction.

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Knowledge Report

The Knowledge Reports provides agricultural educators with significant insight into the degree and depth of student understanding while learning is happening. This provides students with instant feedback and better guide instruction so that it better meets student needs.

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