

## UW-Platteville Professor Brings Virtual Reality Forklift Training to the Classroom

Although an emerging technology in terms of recognizing its full potential, virtual reality forklift training offers a hazard-free training space to students who are entering an environment where forklifts and other heavy equipment are present.

There are two types of students: those who grew up around equipment and those that did not. Teaching the book knowledge to those that have already been around the equipment is easily handled in the classroom, however, the difficult part has always been trying to provide real-world experience while in the classroom. With new technology, we have a solution to this age-old problem.

### Meet Mark Miner

When a student at UW-Stout working on a degree in education and driver's education, Miner learned all about equipment safety and from there knew what he wanted to do. Miner obtained his master's and pursued his passion for construction and safety. Today, as UW-Platteville Professor and Coordinator for both the Building Construction Safety Management and the Occupational Safety Management degree programs, the VR Forklift Simulator was just what he was looking for and was eager to use in the classroom.



He then began his career overseeing major projects in underground trenching, excavation, sewer/water, highway bridges and roads, heavy equipment, and working on large commercial hospitals and buildings. Miner had put together a career path that allowed him to experience as much as he could to educate future safety leaders from his own experiences. He always wanted to make his way back into the academic world, so he did just that.

Years later, Miner is back in the educational realm as an instructor for the Industrial Studies Program at UW-Platteville.

### The Partnership

Wolter stepped into the picture when Tony Parsons, Operator Training Manager, and Miner formed a partnership around safety. While attending an operator training safety class at UW-Platteville for staff conducted by Parsons, Miner felt the quality of the presentation and materials needed to be shared with his students. A short time later, he reached out to Parsons, and they discussed what he was in the process of building.

Miner already considered Wolter an industry leader from experience in the field, so it didn't take much to talk Parsons into assisting with educating students with real hands-on experience.

Later, Miner attended Wolter's 2-day Train-the-Trainer class covering forklifts, construction and warehouse styles, and aerial lifts, where he applied the curriculum to his vast safety and equipment knowledge. Attending Parson's class helped him later present a high-quality class with materials backed by an industry leader. Miner had attended train-the-trainer classes before and taught TTT classes in the same fashion. He was in tune with everything the class discussed, though looking to run a program that would stick with his students after college.

## Introducing the Simulator

Miner knew that he had partnered with an industry leader. After the classes and conversations with Parsons, he felt they had the same beliefs about equipment safety. Between himself, Wolter, and UW-Platteville's reputations, the hope is that when students go out into the real world, they will value the training they went through.

Miner attended the class hoping to hear and see new things, which worked largely in his favor as he was introduced to the Virtual Reality forklift simulator. When Miner first learned of the VR technology, he was skeptical, but when Tony brought the unit to UW-Platteville, he sat on it and thought to himself, "this is absolutely incredible."

## The Plan

When it came time to pitch the VR forklift simulator to the university, everyone agreed that it will be a great addition. Miner had many of the staff, students, as well as the Dean of BILSA, test-drive the simulator, thus introducing a whole new concept in



educational technology. Miner knows that incorporating VR into his curriculum will not replace traditional teaching practices, but where he sees the biggest value is in being able to show them the hazards of the workplace and views of future coworkers via virtual reality with no hazards while still in the classroom. The ability to switch between lectures and a virtual warehouse will nearly eliminate lost time previously spent traveling to other sites. When the students put the goggles on, they are immersed in a warehouse environment with realistic hazards that cannot be duplicated in the classroom.



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