

### Palm Beach State College: Answering Industry’s Call with Simlog’s Personal Simulators

Located in the State of Florida, Palm Beach State College (PBSC) has five campuses of instruction that offer over 130 academic and certificate programs across a variety of disciplines including cosmetology, automotive and transportation, supply chain management, and welding.

With a focus on fostering local industry partnerships to develop new training opportunities, increasing student employability, and answering industry’s need for a qualified workforce, PBSC established a Heavy Equipment Mechanics Program at its Belle Glade Campus incorporating a simulator lab with Simlog’s Personal Simulators.

Belle Glade is located on the southeastern shore of Lake Okeechobee in western Palm Beach county. With a population of over 18,000 people, this rural community’s main economic activity is agriculture. Although located in a wealthy county, it is an economically depressed area where unemployment rates are very high.

#### The Simulator Lab and the Program

In 2016, PBSC, under the leadership of Dr. Gloria McAlister, the college’s Program Director for Post-Secondary Adult Vocational Programs, partnered with Florida Crystals Corporation, a local producer of sugar products, with the goal of designing a program that met the company’s needs and workforce demand in the area.



Palm Beach State College  
Belle Glade, Florida

Leveraging the same simulator lab used in the Heavy Mechanics Program consisting of 5 dedicated tabletop stations with Hydraulic Excavator, Wheel Loader, and Forklift Personal Simulators, both Palm Beach State College and Florida Crystals team members worked hand-in-hand to establish a curriculum and benchmarks for training either excavator or wheel loader operators with the simulators aligned with the company’s standards. Target values for the simulated excavator and wheel loader work were carefully established to ensure that trainees achieved a quality transition to the workplace.

The efforts resulted in a program that spans a 5-week time period, and requires 45 hours of instruction using either the excavator or wheel loader simulator. Florida Crystals’ employees who successfully finished the simulation program then graduated to complete their training with the company’s real heavy equipment.

#### Benefits to Employer

After the first class of employees graduated, the company reported on the benefits of the program and the use of simulation. Training with the simulators did not tie up their equipment, and employees were able to practice at the college with flexible hours, even in the evenings, without the need of a Florida Crystals supervisor.

Other benefits included having a safer emotional atmosphere for trainees to build confidence, less damage to equipment, fewer accidents, and a reduction of training time with real equipment.

#### Cost Savings

Florida Crystals also reported very satisfactory cost savings per trainee. The following tables illustrate the costs and savings when training using only real equipment, versus training using the simulators first and then real equipment. Estimates are based on 45 hours of training, and do not include field supervision time, which could significantly increase cost savings. (The simulator costs include PBSC supervision of the simulator-based training.)

## Excavator

Labor/Machine/ Fuel Costs	Simulator Costs	Savings/Trainee
\$51 - 57 /hour	\$44 / hour	\$280 - 520

## Wheel Loader

Labor/Machine/ Fuel Costs	Simulator Costs	Savings/Trainee
\$70 - 98 /hour	\$44 / hour	\$1,360 - \$2,160

## Benefits to the College

According to Dr. McAllister, thanks to the simulators and the program, the college has been able to create strong bonds with community partners and enhance its public relations.



Personal Simulator Lab at  
Palm Beach State College - Belle Glade

“When our community partners started talking about the simulation training at the college, we started getting calls from other partners expressing their interest in doing the training as well,” said Dr. McAllister. “We have been able to reach out to other partners to offer them the program.”

Simulation has also put a spotlight on the program and the campus, and has sparked the interest of other PBSC campuses that have expressed interest in acquiring simulators, too.

## Future Considerations

With the success of the program, Palm Beach State College is looking to expand the number of simulators and features offered, and plans to include Simlog’s new Backhoe Loader Personal Simulator in their program. Dr. McAllister is also engaging in conversations with other partners, and looking for more opportunities for operator training and research.

As a next step, Florida Crystals is looking to cross-train so that someone who operates an excavator is also trained to operate a wheel loader. This will allow the company to be more flexible in the field, and transfer employees from one area to another area as needed, increase existing employees’ skill sets, reducing the need to hire from outside, and enhance the company’s message to the community that employees can grow within the company.

To learn more,  
contact us:

Simlog  
[www.simlog.com](http://www.simlog.com)

Palm Beach State College  
[www.palmbeachstate.edu](http://www.palmbeachstate.edu)