Hamilton Sundstrand helps teachers bring the workplace to classrooms

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Ralph Minaya, a mathematics and engineering teacher at the Academy of Engineering and Green Technology within the Hartford public high school system and Ismail Orabi, a Mechanical Engineering professor at the University of New Haven, started new jobs this summer.

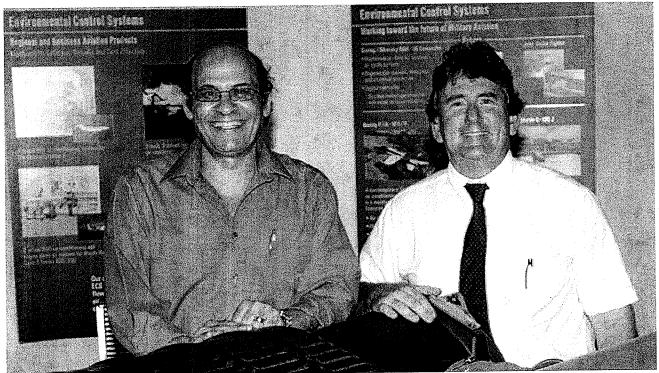


Ismail Orabi (left) and Ralph Minaya (right) are local teachers working at Hamilton Sundstrand's Windsor Locks, Conn., facility and participating in the Connecticut Business & Industry Association externship program this summer.

Minaya and Orabi, are working at Hamilton Sundstrand's Windsor Locks, Conn., site by participating in the Connecticut Business and Industry Association (CBIA) administered fourweek externship program.

In early July, Minaya began working with HS within the Mechanical Operations area. The high school math teacher said he worked on a project to develop a formula to help improve the inspection process for the heat exchanger product line.

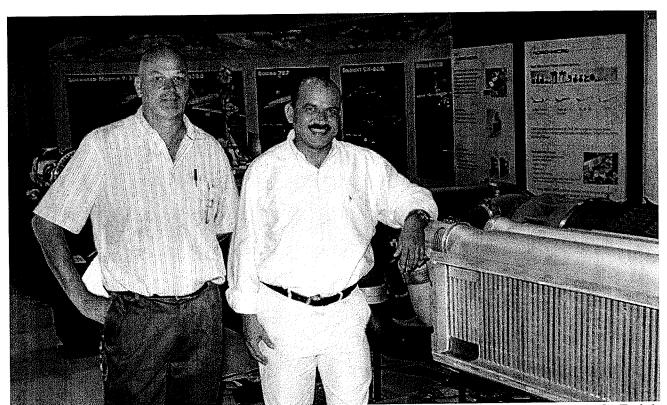
"I spent a few days learning the business and area and then they asked me to use my skills and training to help solve an important inspection process problem," said Minaya, who recently completed his externship. "I plan to bring a scaled-down version of this project into the classroom to teach students about a real world application of the math they are learning."



Ismail Orabi stands with HS Engineer Carl Reimers (right). Ismail and Carl are working together this summer during Ismail's externship.

Similarly, Orabi, the mechanical engineering professor, said after two weeks into the program, he has already learned much about the company and industry. "I've finished a whirlwind of training," he said. "Now, I'm embarking on projects with the Hamilton Sundstrand Engineering and Operations groups to explore engineering labs, testing machine vibration, troubleshooting, fixing production glitches and exploring new areas in laser and fiber optics."

The CBIA runs the externship program for math, science and technology teachers on behalf of the Connecticut Community Colleges' College of Technology Regional Center for Next Generation Manufacturing. The industry internships give educators a better understanding of today's manufacturing processes and technologies so they can, ideally, bring those real-world experiences back to the classroom and prepare students for the future work force. The National Science Foundation funds the program.



This summer, Ralph Minaya worked with Kevin Malloy, a mechanical engineer at HS. Ralph is thankful for the opportunity to work at Hamilton Sundstrand and will bring what he has learned back to his classroom this fall.

Orabi believes the externship will help him gain a better understanding of real-world mechanical engineering applications, in turn, helping students in his engineering classes develop career goals as they enter the work force. "What I wanted to do was hone my craft as a professor. When I saw this program through the CBIA, I was really drawn to the idea of getting into the real world and seeing how to bring that into the classroom."

"Everything the teachers learn is being put back into the curriculum," said Judy Resnick, executive director of CBIA's Education Foundation, the organization funded to run this effort. "Teachers can take this knowledge back and say, 'Here's what you can do with this.' It's not just numbers on a page or theory."

Businesses like Hamilton Sundstrand, meanwhile, have a chance to employ this program to help steer what they want to see in their future work forces. Through these educators, companies are gaining a better understanding of the educational system and the art of influencing change in the classroom.

"This program can help us to create a stronger work force that comes in with an idea of what some of the real world applications are for their learning in the classroom," said Heidi Dirgins, director, Hamilton Sundstrand Mechanical Operations. "We want new workers who understand our business, technology and systems we have in place. If teachers know the kinds of employees companies are seeking then they can relay that to their students."