Networking in the stratosphere

By founding the Knowledge Management Lab at Florida International University, assistant professor Irma Becerra-Fernandez has been able to link students to technology and NASA employees to peer experts.

By Wendy Doscher

As Florida International University assistant professor Irma Becerra-Fernandez hands over 12 pages of academic credentials, it’s hard to imagine she ever had a life before teaching.

But Becerra-Fernandez never fancied herself a teacher. An engineer at Florida Power & Light for six years, she earned a Ph.D. from FIU in 1994. While instructing others in her role as an FPL corporate trainer, she discovered the joys of teaching.

Life, she says, “takes you down its path.”

Today, that path has led the 42-year-old to become the founder and director of FIU’s Knowledge Management Lab. There, she uses the skills she learned in the business world and academia to work with students and create, manage and maintain database systems for private concerns such as Union Planters Bank and government entities such as NASA.

The KM Lab is a quiet, spacious room behind a locked door at FIU’s south campus. Photos of rockets line the walls, and students sit at two rows of computers. There they earn $7 or $10 an hour while working on computer database projects, such as the SAGE (Searchable Answer Generating Environment) and on a scheduling system for Union Planters.

People find out about the programs through word of mouth, Becerra-Fernandez said. SAGE gets about 35 hits per day, with most references coming from corporate salesmen.

Now the couple applies Becerra-Fernandez’s values to their children, eighth-grader Anthony and sixth-grader Nicolle. The family’s favorite pastime? Attending kids’ basketball games. Her home is not a stuffy one, she says. She looks around, leans forward and notes proudly, “I don’t even have a formal living room.”

If her casual approach works well at home, it also works in the classroom.

So far, 60 students from Becerra-Fernandez’s lab have graduated since it began in 1997, and many credit the interactive experience they got there with landing them jobs.

Luís Felipe Vilegas, who started in the lab in 1999, now works for Microsoft as a software design engineer. The skills Vilegas acquired working in the KM Lab on the implementation of SAGE and working with NASA proved to be assets since “people always thought it was interesting” during job interviews, he said.

At FIU, Vilegas was given a lot of freedom to learn about different technologies in the KM Lab. He focused on Microsoft technologies and it paid off. He praises Becerra-Fernandez as a teacher who was always looking for new opportunities.

In school, she grew to love math and encourages people to learn to love it, even if it does not come naturally to them.

And she tries to practice what she preaches: When she had trouble spicing up her writing for an upcoming textbook, Knowledge Management: Challenges, Solutions and Technologies, she made herself rewrite the draft parts.

“The first chapter was horrified,” she laughs.