



Spring 2013

celebrate! innovation
magazin



SPECIAL
ciWEEK 2013
Program Edition

THE ILLUSION OF LIFE Through Robotics

REBUILDING
America's Space Program

CYBERSECURITY
What to Do about It

IF YOU NEVER
CHANGE YOUR MIND
Why Have One?

An animatronic
Mister Rogers



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Celebrate! Innovation Magazine is published biannually by Des Moines Area Community College West Campus. For advertising or content inquiries, contact:

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COVER PHOTO:

An animatronic Mister Rogers created for the Heinz Historical Museum in Pittsburgh. Used with permission.

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EDITOR'S NOTE

The So-Far Unimagined

When a group of students walk in late to class, when directions are rapidly repeated five times, when half the class is absent (again), and when blank stares greet me as I face the room, I question the security of the future. I worry today's young people—my college students—won't meet the challenges facing them in the not-so-distant future. Then, *ciWeek* comes along, and my worries ease.

The buzz for *ciWeek* among students is profound. Each year, I marvel at my student's curiosity and excitement. They plan which speakers they want to hear, they chat about which sessions sound fun, and, despite their best efforts to blend in with their classmates, they just can't help but be eager.

After *ciWeek*, we reconvene as classes and discuss how it went. Students compare notes about who they saw and what they learned. They chatter about the best, most fascinating speakers, and do not hold back about the speakers they didn't enjoy. Most compellingly, they share ideas they have about building a better future, ranging from products they want to invent to government policies for ending poverty. Inevitably, many of my students share the same concern: *ciWeek* taught them they have great ideas, but they're clueless on turning those ideas into realities. What is it that they must do to move from conceptual to tangible? It is from this magazine's featured articles that students can find inspiration, discipline, and action.

At the foundation of turning thoughts into actuality is thinking in new ways. Barbara Stennes' article "Change the Way You Think" encourages readers to shake the funk from their grey matter. Stennes calls for breaking out of stagnant idea-generation methods by connecting innovation to Edward de Bono's teachings on creative thinking. Combined with the never-ending rewards of networking, the average college student has much to gain from her sharing of de Bono's

works. Students can break themselves of the same old "what do I do" to "how do I do it."

Making that shift, however, is wrought with challenges; building a better future certainly will not come easy. This is something today's college student can learn to weather. Who better to learn from than NASA? As detailed in Cassie Kloberdanz's piece "Back to a Better Future," NASA reinvented its role in space exploration after a seemingly damning change in purpose. By working with commercial space exploration companies, NASA took on a consulting role allowing them to remain relevant and keep their ideas moving. Their atmospheric influence on daily lives is immeasurable: meteorology, satellite technology, computing, and, robotics. Combining NASA's experience and knowledge with financially-independent companies like SpaceX can only bring further creative improvements, and, in turn, show a discouraged future engineer sitting in the back of the classroom that not all forks in the road end in a brick wall.

Or maybe said future engineer has a fascination with robots and animation but cannot imagine a way to connect the two. Maybe that young student visited Disney World as a child and was both scared and captivated by the singing pirates with the Monty Python mouths. Through Dr. Gene Poor's article—"The Illusion of Life"—about animatronics, that up-and-coming engineer can see how to build and apply those seemingly disconnected aspirations. Instead of jerky, menacing, shiny-faced pirates singing yo-ho-ho and bottles o' rum, the student can see how convincingly lifelike animatronics are now. (See the cover image and the article for mind-blowing visuals.) Furthermore, the student could connect animatronics with the massive prospective uses for artificial intelligence, hence discovering the so-far unimagined.

It is, indeed, the unimagined that can motivate more computer-oriented students. Make no mistake, in nearly every classroom sits a young thinker who knows exactly how to repair . . . and destroy a company's computer systems. Hacking is not necessarily considered a crime by everyone; to some, it is a skill. But instead of using that skill destructively, that student could build a better future by developing an interest in Dr. Doug Jacobson's concern as shared in his article "Cybersecurity." It goes without saying people are technologically dependent but not all are technologically savvy, and the proud, self-professed computer nerd knows this. What better way to improve the future than to apply those hacking skills to out-hack the ill-intended?

As DMACC West Campus embarks upon the 2013 *ciWeek* with subjects of creative thinking, space exploration, animatronics, cybersecurity, and countless others at the forefront, the potential for idea-building and creativity will be most fervent as students return to their classrooms and reflect on what they learned. They'll share their ideas for innovations and, maybe, will have built the mental bridges to make their abstract ideas concrete. And I cannot help but think . . . there is hope yet.



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