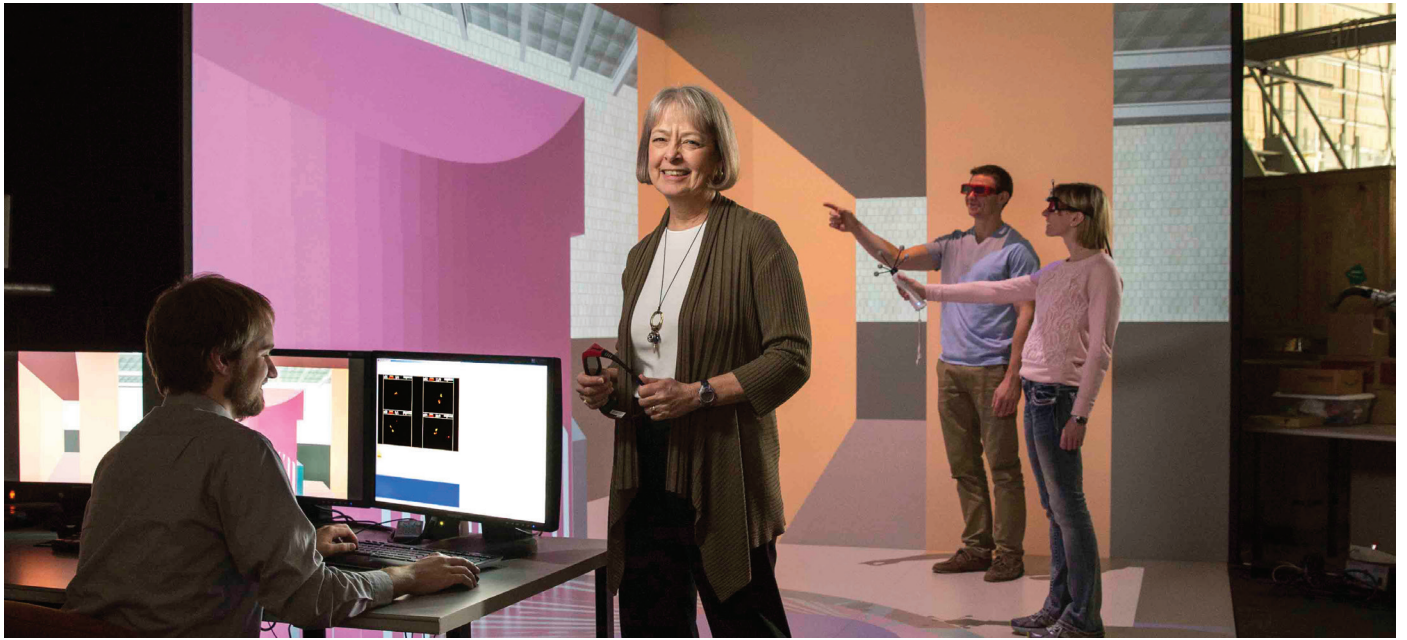


YOUR IOWA STATE

STORIES OF TRADITION AND TRANSFORMATION

SPRING 2015

Photo: Kathryn Gamble



The Reality of Technology and Communication

Often, new technologies can be associated with poor communication habits and isolating behaviors. But at Iowa State, students utilize today's best technology to foster communication – specifically between teams from different disciplines.

Judy Vance, the Joseph C. and Elizabeth A. Anderlik Professor of Engineering, has made Iowa State a leader in virtual reality for industry and education. She is a faculty fellow at the Virtual Reality Applications Center, or VRAC, which began as the Iowa Center for Emerging Manufacturing Technology when Vance was a student at Iowa State.

Vance's work puts tools such as VRAC's METaL (Multimodal Experience Testbed and Laboratory) in engineers' hands, improving collaboration and accelerating product development. For example, engineers from Ames manufacturer Danfoss use METaL to virtually manipulate a three-dimensional model of a pump to resolve conflicts between the design and the manufacturing process. The team "can

walk around models and reach out, take parts off and put them on," Vance said. "Where it really makes a difference is when you're trying to answer questions involving how a person has to bend and reach" during assembly.

Vance's teaching likewise puts students at the forefront of virtual reality-assisted design. In her sophomore engineering design course, teams create a product and produce a prototype. "They can bring their design into METaL, like the Danfoss design team," Vance said, "and work out details." Iowa State architecture students also used METaL as part of a research project

exploring how people use virtual reality to make decisions. Next, Vance will bring architecture and engineering students together and observe how they use the technology to communicate.

"Communication is the heart of the design process," Vance added, especially when working across disciplines. "By showing the product in real size and allowing natural human interaction, virtual reality can pass on an understanding of the complexities of what we're looking at."

Crossing Borders
Iowa State students flocked to study abroad programs in record numbers over the past year, studying and working in more than 50 countries.



We Found Them! (Maybe)

The winner of our #ISULoveStory contest from the last issue is a story from **Jan Carlton and Warren Ahnell**. We received a message from Jan saying that she believes she and Warren are the couple in the picture we used. After all, the dates and stories matched up. After checking with the Iowa State University records department, we couldn't gather enough information to prove it absolutely. What do you think?

To read their full story – as well as many other heartwarming submissions – please visit isuf.info/isulovestory



Original Photo

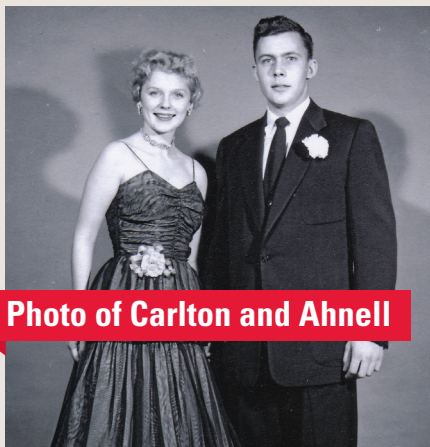


Photo of Carlton and Ahnell



Photo: Paul Gates

A Student Today, For Tomorrow

It's student teaching that often forges great teachers – an increasing necessity in a world built on education and learning, especially in science, technology, engineering, and mathematics.

“A thriving society is based on providing a good education for future doctors, lawyers, plumbers, politicians, technology experts, shopkeepers – the foundation from which everything is built,” said Pat Carlson, director of undergraduate education for Iowa State's School of Education.

Enter the Myrna and Jon Hamann Student Teaching Scholarship, designed to support education majors at a critical time who are planning to teach STEM subjects.

The scholarship's first recipient is **Ashley Sonderman**, a senior in elementary education who wants to teach math and science. Initially worried about finances during student teaching, the financial boost allowed her to broaden her horizons even further, quite literally. One of her student teaching placements is in Norway, enabling her to learn about educational systems in northern Europe.

She's excited to be the teacher in the classroom for the first time. “I want to get to the child underneath,” she said. “I want to get to know the students and their particular strengths and talents so I

can help them advance and find their purpose in life.”

Sonderman is well aware of the importance of her future profession. “I love teaching. It has a true impact on society. It challenges people. It helps them learn to improve themselves, and that leads to an improved society. I want to be part of that.”



WE WANT TO HEAR FROM YOU!

To complete our quick readership survey and tell us what you think about Your Iowa State visit surveymonkey.com/s/YIS15.

The Pursuit of an Applicable Education

“My life goal is to touch as many lives as possible,” said **DeQuan Burnside**, a software engineering major. Only a junior at Iowa State, he and a friend are already developing an application for smartphones called Move. “It’s a social events app focused on community connection and bridging the gap between citizens and the organizations and events they care about. For example, freshmen at Iowa State may not have a clue what is available in Ames when they first arrive. Move will turn information usually distributed via event flyers into digital events,”

said Burnside. “In short, the app will answer the question ‘What’s going on tonight?’”

While Burnside plans to turn his smartphone application into a business, he isn’t waiting for graduation to hone his entrepreneurial skills. “As a young entrepreneur, I want to take advantage of the resources at Iowa State and start my journey now,” he said. “I love the versatility and options that software development and design offer.” He hopes to create and distribute several smartphone products by the time he graduates in May 2017, and wants to continue growing his company and positively impacting others throughout his career.

“Receiving scholarship support has helped me attend this fine university,” said Burnside, “and I have grown in many ways – most of which money can’t buy.”



Contributed photo

ORGANIC FARMING: AUTOMATED

Perhaps it goes against the typical image of how a small organic farm is run, but Iowa State professor **Le Tang** has his sights set on the future of organic agriculture.

After talking with Iowa growers of small to mid-sized vegetable plots, Tang recognized a hole in current weeding approaches that innovation could fill. His solution? A weeding robot. With an automated assistant, organic farmers would be able to lower the level of labor and chemical inputs in their gardens, ultimately resulting in lower prices at the farmer’s market.



Record Student Philanthropy!

Students involved in Iowa State University’s 2015 Dance Marathon raised a record amount of \$444,000 for the University of Iowa Children’s Hospital. This adds to Iowa State’s grand total of over \$3 million since Dance Marathon began in 1998.

Welcome to **YOUR IOWA STATE**,
the newsletter that keeps you connected
with **Iowa State University**. Look inside to
find out what's happening on campus as
well as to relive some of your own Iowa
State memories.

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Buried History in Marston Hall

During the recent renovation of Marston Hall, construction workers unearthed several artifacts from under the floorboards – some dating back to the 1800s. Among the items found were a ceramic plate, an inkwell, a wine barrel, a drinking cup and a lard bucket. Although no one is quite sure why the bucket was used in Marston, lard can be used in baking or as a spread. While still used in cuisine today, it's not as popular as it was during the 19th century.