Inspire. Reach. Achieve.

Victoria Thompson, WSU Student Association President 2010-11
I can’t help but be inspired when I think of the accomplishments of the faculty, staff and students at Weber State University. Whether I talk to alumni or current students about their experiences at Weber State one thing remains constant — personal interaction with faculty and staff is the highlight of their educational experience. Even though the 2009-10 academic year saw unparalleled enrollment growth at WSU, we remain committed to the fundamentals that make this institution great.

Because we believe higher education is a life-changing experience, we created the Dream Weber program to provide access to Utah residents who might not otherwise be able to afford to attend the university.

The accomplishments chronicled in 2009-10 illustrate the many ways our faculty and staff inspire students, and their colleagues, to reach further than they thought they could and to achieve extraordinary results at the local and national levels.

Read about student successes in performing arts, business and athletics. Meet faculty who are reaching out — across the globe and even into the galaxy. Get inspired by the many ways our students, faculty and staff are making a difference in the community. Your involvement in and support of Weber State University make it possible for us to inspire, reach and achieve today and in the future.

F. Ann Millner
Weber State University President
When Weber accepted me I was so ecstatic.

-Belia Alvarado
Edward Walker, a Weber State University chemistry professor, can make just about anything into a lesson. “Can you believe that box used to be red?” he asked, pointing to a sea-green box of CranActin in his office. “The sunshine has really faded it. Now I like to use it as an example of stability testing for packaging,” he said with a smile.

While the box, close to 15 years old, makes for an amusing chemistry lesson, the cranberry supplement inside is actually a product that benefitted from a discovery Walker made with the assistance of a group of students in the early 1990s. Through laboratory research they helped identify the active ingredients in cranberries that help prevent bladder infections.

“Research projects like the cranberry study are meaningful because students apply the skills they learn in the classroom to real-life situations,” said Walker, a 1976 alumnus of Weber State’s chemistry program who, as a student, worked alongside professor Robert Beishline on a coal liquefaction project.

“Being involved in research as an undergraduate, I had the opportunity to take what I learned in class and put it to use. Having been a professor at Weber State for 29 years, I’ve enjoyed giving my students those same kinds of experiences.”

Chemistry major Stuart Zuniga is currently working with Walker on a research project. “He explains everything so well. He never teaches anything in the lab or the classroom without giving a real-world application of it,” he said.

Walker, a 2010 Presidential Distinguished Professor and a recipient of the Governor’s Medal for Science and Technology, is also director of the Center of Excellence for Chemical Technology at WSU. As such, he takes students to industries throughout Northern Utah, where they develop analytical methods and solve manufacturing problems.

“When students help local businesses, they have such a pride of accomplishment. And oftentimes, the company ends up hiring them, sometimes before they graduate. It’s win-win,” Walker said.

“In His Element
Chemistry professor inspires love of learning

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Christian Petersen wouldn’t describe himself as a video game enthusiast, yet his research on gaming suggests it may be beneficial under the right circumstances.

Petersen, a senior earning his degree in psychology at Weber State University, represented Utah at the 2010 Undergraduate Research Posters on the Hill event at the U.S. Capitol in April. This is the fifth time in six years that a WSU student has been invited to represent the state at the prestigious annual event.

“The main idea behind my research was the suggestion that there may be benefits to gaming,” Petersen said. “I looked at articles that showed benefits to gaming. I wanted to try and replicate those results.”

Petersen conducted a study with 50 university students whose video gaming habits varied dramatically. Participants completed a questionnaire about their gaming experience and took a short computer-based test that measured visual responsiveness both before and after playing Halo 3, a popular first-person shooter game.

“We found a significant increase in ability to spot changes in visual field after playing the video game,” Petersen said. “Visual response and alertness increased significantly from the pre-test to the post-test.”
STEP UP

Student organizations promote engineering, science in local junior highs

Two WSU student groups — the Science, Technology, Engineering Program (STEP) and the Society of Women Engineers — organized an eight-week seminar to encourage students at Mount Ogden Junior High to prepare for careers in engineering, science and technology. The seminar is for students involved in the Utah Scholars program, a voluntary college preparatory curriculum that consists of more rigorous classes in math, English and science for students in ninth to 12th grades. WSU students have served as mentors for the program since 2008.

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Opening Doors

Federal workforce program recruits WSU students

A successful partnership between WSU’s Services for Students with Disabilities and the federal Workforce Response Program (WRP) is helping students find jobs with the federal government. Since 2007, the number of students placed through the WRP has more than tripled, from five students in 2007 to 11 students in 2008 to 16 students in 2009.

WSU has worked with the federal program since the 1980s. More than 20 years later, the dramatic increase in interest prompted the federal recruiter to spend three days interviewing students on campus in 2009.

Reach.

Learn how a dedicated group of faculty and staff created the Technology Enhanced Redesign of Math (TERM) to enable greater numbers of WSU students to reach math competency “on their own terms.”

Meet two WSU students who were recognized for being among Utah’s top student entrepreneurs. Tune in to a computer science class that created a mobile app to extend a Utah company’s reach.

Whether it’s extending a hand to the business community by assisting start-up companies, or reaching out to the public schools through service, WSU students and employees are touching their community, their world.
WSU faculty and students are lending a little money to make a big difference in the lives of some of the poorest women in Central America.

In 2009 and again in 2010 foreign language professor Alicia Giralt organized trips to Guatemala to lend 400 quetzals, or approximately $50 in U.S. currency, to individual women in the village of San Pedro La Laguna. The microloans are used for goods and supplies to jump-start small businesses selling such products as tamales, tortillas, hot drinks or traditional embroidered blouses.

Jason Herman, a Spanish major and chemistry minor, helped raise donations. He then traveled to Guatemala and worked with a woman who owned a tiny store. Together they planned how to increase the store’s inventory and also its visibility with a new sign.

“It was a phenomenal experience,” Herman said. “In this situation we were actually able to get to know the people and help them out in their personal financial lives and discuss their homes, their needs, their hopes and their goals.”

The Guatemalan women formed a cooperative to collect loan payments, and in just six months, all 24 of the original loans had been repaid with interest.

A third trip is already planned. The dream is to create a learning center and museum where Guatemalan women can become literate while still operating businesses in shops below the school.

A Little Goes a Long Way

Microcredit loans change lives in Guatemala

Scott Sonntag’s fish story contains more truth than fiction. Just ask science and environmental educators at Mount Ogden Junior High and the Ogden Nature Center.

Scott and a team of classmates from design graphics and manufacturing engineering technology volunteered more than 1,000 hours designing and creating two special aquariums that teach children how changes in the environment affect native fish.

The aquariums have pumps and filters housed in Plexiglas cases, so those who view the fish can clearly see things such as the nitrogen cycle created to clean the water. The aquariums are also stocked with two types of native Utah minnows, least chub and leatherside chub, on the sensitive species list.

The project was funded by a grant from the Alan E. and Jeanne N. Hall Endowment for Community Outreach. Local companies provided discounts on supplies, and the manufacturing and mechanical engineering technology department at WSU donated the facility and tools required to design and construct the aquarium systems.

The Utah Department of Wildlife Resources, the zoology department and the Living Planet Aquarium selected and stocked the fish to bring awareness to the minnows’ precarious status.

“The most impressive thing to me was the power that comes from getting different organizations in the community, which normally wouldn’t work together, united behind one common goal,” Sonntag said.

Team members say theirs will be a true fish story if enthusiastic teachers and eager students use the aquariums as an educational tool for years to come.
While traveling to Utah from China in 2008, Cliff Nowell was thinking about the number six: If six students applied to Weber State University’s new international economics program, it would be a success.

He didn’t get six. He got 22.

The Chinese students, all from Shanghai Normal University, officially started at Weber State in the fall of 2009. Having already completed two years of their studies in China, they will earn their bachelor’s degrees in 2011, from both WSU and SNU.

Nowell is an economics professor in the John B. Goddard School of Business & Economics and proponent of the international economics program. He is instrumental in recruiting students throughout the world to earn an economics degree from WSU.

Nowell and his wife, Laura Anderson, an instructor specialist in WSU’s Department of Telecommunications and Business Education, were invited to guest teach at SNU the first time in 2001. Over the next several years, they made seven trips to China.

“We love teaching there because the students have such different life experiences,” said Nowell. “We thought if they could study here with our local students it would inspire learning and foster cultural understanding.” Nowell believes that adapting his classes to international students has enhanced the learning environment for everyone.

As part of the partnership with SNU, professors in the Goddard School voluntarily teach in China. “It’s a fantastic experience for us, as professors,” Nowell said. “It makes our teaching more fresh.”

Yao Mue, a junior economics major, is pleased with her experience at Weber State. “Everything has been positive,” she said. “I enjoy my classes, and the professors have made us feel welcome. Dr. Nowell and others have even had us to their homes for dinner.”

Currently, 33 new students from China and 15 from the Woongji Accounting and Tax College in South Korea have applied to the program. “Our goal is to have students from a variety of countries come here and to send some of our local students to other countries to study,” said Nowell.

For his work with the international economics program, Nowell was named WSU’s John S. Hinckley Fellow in 2010.

“Increasing WSU’s Exchange Rate
Professor propels program that inspires learning, cultural understanding

“If they could study here with our local students it would inspire learning and foster cultural understanding.”
– Cliff Nowell
After watching too many math students fall behind, the Weber State University developmental math program decided to start offering courses in a new, improved format.

Technology Enhanced Redesign of Mathematics (TERM) utilizes a Web-based computer program to help students more effectively learn math at their own pace.

In a TERM instructional setting, students meet each week for one hour in a classroom and spend a second hour in a TERM computer lab. In both the classroom and the lab, students work on math using the Web-based program, and faculty and peer tutors provide individualized help.

Students also are able to work on the Web-based program from their home computers or any computer with an Internet connection.

“During a typical course lecture, it's almost impossible for a faculty member to address each student’s individual needs in terms of clarifying concepts,” said Kathleen Lukken, who co-chaired the TERM steering committee. “In a TERM instructional setting, students are working on math, and faculty and peer tutors are there to immediately assist each individual student.”

TERM is now included in all sections of Math 950, 960 and 1010. It's encouraging for developmental math faculty to see that student's grades and comprehension rates are improving with the TERM program. Before the implementation of TERM, the average grade in the developmental courses was a C. Now that the new program is underway, the average student grade is a B, indicating students are pushing themselves to learn more than the minimum required to get by.

Students also have positive feedback about their experiences with TERM. “I like that you can go at your own pace,” said Ashlee Miller, a freshman in the TERM program. “I've learned a lot. My confidence in math has skyrocketed.”

Math on Their Own TERMs

Developmental math program uses new technology to enhance student learning

“I’ve learned a lot. My confidence in math has skyrocketed.” - Ashlee Miller

New Degrees

2009-10

Bachelor of Science in Electronics Engineering

Master of Professional Communication

Master of Science in Radiologic Sciences

Master of Taxation
Students in Rob Hilton’s “Advanced Topics in Computer Science” course got to experiment with more than just the latest technology when they built a mobile phone “app” for Bountiful-based company, RawData. The app is transforming the way marketers track individual’s media consumption.

The student-built app, in tandem with RawData technology, does for traditional media what Web analytics did for the Internet. The application uses smart phone technology to track real data on the music, videos, television, radio and video games the person consumes. Advertisers, ad agencies and broadcasters use this data to track how consumers use different forms of media. It also provides information on how a consumer moves back and forth across these disparate media platforms.

While creating the application, students learned about programming for mobile devices and enterprise level team development to meet the needs of a business client.

Hilton believes the most valuable aspect of the project was the experience his students gained working with a leading-edge technology. “They now have a skill that few have at this point in time,” Hilton said.

Curt Roberts, vice provost for Innovation and Economic Development who heads USTAR’s Northern Utah Technology Outreach Center, describes the application as a “much smarter, more robust way of measuring media consumption.” Through a USTAR technology grant, Roberts is working with RawData founder Chad Nuesmeyer to help take the idea from concept to market.

USTAR Northern Utah Region Results

In addition to the accomplishments of the Northern Utah Region of USTAR, 12 Weber State University projects received technology commercialization grants in 2009-10 for a total of $443,000.
Students honored for entrepreneurial spirit

Like so many CEOs, Weston Thayne and Curtis Funk worry about customer satisfaction, growing their businesses and watching the bottom line. But unlike other CEOs, they also worry about their grades and earning a college degree.

In addition to being entrepreneurs, Thayne and Funk are Weber State University students. Utah Student 25 recognized both for being among Utah's top 25 student entrepreneurs.

Thayne's company, Premium Landscaping LLC, focuses on both landscape maintenance and installations, including chain-link and vinyl fences. Thayne juggles balance sheets and client calls with pursuing his degree in business administration and a minor in psychology.

Funk heads up FuneralRecording.com, an emerging field that assists funeral homes and mortuaries by recording and broadcasting services on the Internet. "The biggest challenge is every time I have finals or midterms, we have a huge day at work," said Funk, a senior working on his bachelor’s degree in sales and service technology.

Both students said they learn a lot in the classroom that they can apply to their companies, from the art of negotiation to dealing with people to accounting. "I don't think I've taken a sales class yet that I haven't benefited from and that hasn't changed the way I work," Funk said.

Achieve.

Success on the national “stage” comes in many different forms. Meet a group of music students who placed at the top of their respective instrumental competitions at the Music Teachers National Association conference in 2010. See how WSU’s star wide receiver scored big wins for charity as the NFL’s Mr. Irrelevant.

Did you know that WSU has an intercollegiate ethics bowl team that placed second at nationals this year? Or that an economics major from West Haven, Utah, is the top student statistician in the country?

Whether it’s an award-winning professor in musical theater, or a group of nursing faculty who penned a nationally acclaimed text, WSU students have an opportunity to learn from the best.
When sophomore pianist Fan-Ya Lin took the stage at the Music Teachers National Association (MTNA) competition in Albuquerque, N.M., in April, she was inspired by the words of her mentor, music professor Yu-Jane Yang. “Now, go and have a great time on stage with your best friend.”

Lin was one of seven finalists to compete in the national piano competition, which has been described as one of the most competitive piano events in the United States. “This is like the NCAA Championship of piano in the U.S.,” said Yang.

“Fan-Ya was a bit more nervous than usual due to the high level of competition,” Yang explained. But Yang had no doubt about Lin’s musical ability. “Fan-Ya hears amazing details in music. That makes it possible for me to work with her on the highest artistic level of piano playing to produce beautiful tone colors, sensitive timings, a large range of dynamics, stylistic articulations and vivid characters in her performance.” Knowing her student was well-prepared, Yang told her not to worry about competing with others but just to play her best and have fun with her pieces.

Lin dazzled the judges and audience with her performance that evening. When the final notes died away in the auditorium, it was Lin’s turn to be dazzled. She not only edged two doctoral piano students to win the Steinway Young Artist Piano Competition, she also was awarded a brand new Steinway upright piano worth $22,000, courtesy of Steinway & Sons.

Lin was one of six students from WSU’s Department of Performing Arts to compete at the MTNA nationals. WSU sophomore Jana Gardner, who studied flute with Cindy Henderson, took second place in the national Woodwinds competition.

In addition to Lin and Gardner, Moriah Wilhelm competed in Senior Strings and the Tria Fata Piano Trio (Nicholas Maughan, piano; Kathryn Palkki, violin; and Samuel Runolfson, cello) competed in Chamber Ensemble.

Each of these students won state and regional competitions to culminate in a trip to nationals and a noteworthy year for WSU’s music program.

“Fan-Ya hears amazing details in music. That makes it possible for me to work with her on the highest artistic level of piano playing.”

– Yu-Jane Yang
For bringing heavenly images of the Hubble Space Telescope down to Earth, NASA has selected Weber State University’s Ott Planetarium as top in the nation with a Gold Star distinction. The Top Stars contest was launched to honor the 20th anniversary of the Hubble Space Telescope. NASA invited educators to submit their best examples of using the Hubble telescope in science, technology, engineering or mathematics.

Ott Planetarium specialist AmyJo Proctor created the award-winning planetarium show called “Expanded View.” The 23-minute program explores some of the most beautiful deep-space objects through the eyes of the Hubble, Spitzer and Chandra space telescopes.

Over the Moon

Physicist Presents Research to Royal Astronomical Society

Weber State University assistant physics professor John Armstrong recently had the opportunity to present his research to the Royal Astronomical Society in London. Armstrong was invited to make two presentations before the renowned society, an opportunity he characterized as “once-in-a-lifetime.” Armstrong attended a special discussion meeting on “Astrobiology on the Moon,” held May 14. Later that day he spoke on “60 Minutes to Near Space,” a presentation about his research work with the university’s High Altitude Reconnaissance Balloon for Outreach and Research (HARBOR) project and its applications in geology, astrobiology and astronomy.

Music to His Ears

Professor Earns National Playwriting Honor

A creative take on a familiar classic garnered a national award for Weber State University performing arts professor Jim Christian. His adaptation of “Sleepy Hollow,” co-written with Tom Edward Clark, received the Kennedy Center’s American College Theater Festival Musical Theater Playwriting Award. As part of the award, Christian and Clark received fellowships to attend the Eugene O’Neill Playwrights Conference in Waterford, Conn., this past summer.

Nursing Faculty Text Named BOOK OF THE YEAR

Since its inception in the early 1950s, Weber State University’s School of Nursing has had a rich, pioneering history. Now a new textbook, written by WSU nursing faculty, is receiving national recognition for chronicling the history of the nursing profession.

"A History of American Nursing: Trends and Eras" by WSU faculty Deborah Judd, Kathleen Sitzman and G. Megan Davis has been chosen as a winner for the 2009 American Journal of Nursing Book of the Year award. This text, honored in the journal’s Public Policy and History category, was recognized in the January 2010 edition of AJN.
Ethics Bowl Team Places Second in Nation

Weber State University’s Intercollegiate Ethics Bowl team had its best showing ever, placing second in the national Ethics Bowl competition in Cincinnati. In a format similar to intercollegiate debate, teams of three to five members are given 10-15 cases to prepare before the competition involving moral dilemmas (e.g. the Ku Klux Klan wants to join the adopt-a-highway program). Teams compete in head-to-head with a moderator asking each team a question about one of the scenarios. They have 10 minutes to craft a response followed by a series of rebuttals. A panel of judges evaluates and scores each team's performance, quizzing team members regarding their positions.

Impressive Stats

Economics Major Tops Nation in Statistical Analysis

Ryan Holt, a quantitative economics major from West Haven, Utah, took first in the nation in statistical analysis at the Phi Beta Lambda (PBL) National Leadership Conference in Nashville, Tenn. He also placed fifth nationally in microeconomics.

Holt was one of 12 Weber State University students who placed in the top 10 nationally in their respective categories at the PBL competition held July 8-13. The WSU business ethics team consisting of Samantha Casey, Michael Dunkley and Devin Hadley took second in the nation in the business ethics category.

Batter Up!

Three years in the making, the Wildcat softball team played its first season in more than 27 years. Everything about the team was new this year: the field, the players, the coaching staff and the conference.

In December 2007, WSU announced the restoration of softball. Tina Johnson, who previously led Colorado College’s softball program, was hired in July 2008 to coach the team. An invitation to play in the Pacific Coast Softball Conference came in October 2008, and a field was constructed just north of the Dee Events Center in 2009.

Coach Johnson admits there are challenges to starting a new program but also believes there are positives. “We don’t have any baggage,” she said. “We can set our own traditions and expectations.”

One of Johnson’s goals is to involve WSU’s former players. “It’s a fresh start, but we want to connect with our alumni. We want that history to tie in as we start this new generation of Weber State softball.”
Weber State University is a comprehensive, public, master’s degree granting institution located in Northern Utah. WSU offers more than 200 bachelor’s degree programs, 12 graduate programs and an array of professional certificates. Accredited by the Commission on Colleges of the Northwest Association of Schools and Colleges, the university takes pride in its excellent teaching, extraordinary commitment to meeting the educational needs of students and ongoing service to the community.