I AM PLEASED TO INVITE YOU to examine the inspiring stories coming out of your College of Education. Our faculty are preparing the next generation of researchers, teachers, counselors and educational leaders who will be shaping a vastly different future in education than what we remember. This publication samples human profiles, research and advances in teaching and education programs to excite enthusiasm for your college. I invite you to follow our activities on our website or ask to receive our e-newsletter.

The fastest growing program in the college is in working with students where English is a second language. This program is central to college efforts to diversify the cultural backgrounds of newly licensed teachers. Graduates from the Community College Leadership program continue to be elevated to senior positions of leadership throughout the Pacific Northwest. The Counseling faculty are expanding their program to add a clinical mental health option to the online master’s degree that already serves school counselors. The STEM program has received funding from the National Science Foundation to support math and science teachers who will work in high-need schools.

Faculty take great pride in the quality of the educational experience provided by the college. Two instructors are routinely recognized for the exceptional quality of instruction they provide. Their courses are consistently over-enrolled by students from all over campus. They each have received the Phyllis S. Lee award (2013 & 2016) honoring a member of the Oregon State community who exemplifies Dr. Lee’s commitment and dedication to social justice and the teachings of Dr. Martin Luther King Jr.

This issue of INSPIRE has stories of encouragement, dedication and creativity engendering the best in education, leadership and research. We hope you enjoy reading it and sharing your pride in the work of your college.

Larry Flick
Dean, College of Education
FIESTAS turns local businesses into real-world classrooms to build lasting interest in STEM learning in underrepresented communities.

EMPOWERED
Isamar Chávez knows access to literature and education is powerful — and she wants to break down barriers so others have those opportunities.

THREE C’S
SYNERGIES inspires local students by connecting STEM learning to their interests beyond the classroom.

BOOK LOVE
Book Love gets kids excited about reading nationwide by giving away classroom libraries to individual teachers.
Students talk about sexism and sexual assault, racism and gender bias and what it feels like for migrant students to struggle with English and grow up being told they will never make it to college.

“After weeks three and four, we are no longer a lecture class,” Cornwall says. “We have panels and dialogues on different topics, and we do small group work, but we don’t have exams. We learn from each other, try to build a learning community. It’s about listening empathetically.”

Cornwall finds himself saying less and less as the course goes on.

“When students hear each other sharing about these topics, they feel it and they learn,” he says. “Reading it in a book or hearing it from me is different from when they hear it from their peers. Having multiple methods of presentation allows students to determine what’s the best takeaway.”

In a recent class Cornwall screens a documentary about race, “If These Walls Could Talk,” then sets up a row of chairs across the front of the room. He asks anyone who identifies as a person of color to take a seat in one of the chairs facing the class. Fifteen of the 50-plus students move forward and sit in a long row. Cornwall sits in the row, too. Then he asks the panel of students how they identify. They answer down the row: Vietnamese. Pacific Islander. Half-black, half-white. Korean. Latina. Black. Half-black, half-white. Korean. Latina. Black. Half-black, half-white.
Ph.D. Candidate Holly Thompson:  
A School Counselor with Street Cred and Clout  

Doctoral candidate Holly Thompson knows how to relate to students who come from generational poverty, addiction, abuse and homelessness. She’s been there.  
“I love those kinds of kids — from families that are a mess,” she says. “I experienced a lot of that, so I’m good at working with this population.”  

Currently a counselor at Rowe Middle School south of Portland, Thompson inspires kids to hang tough and get through hard times. “I tell them I did it, so they can, too, and they hear that,” she says. Thompson, who was Oregon’s 2015 School Counselor of the Year, was selected for First Lady Michelle Obama’s Reach Higher Initiative and is president of the Oregon School Counselor Association.  
The single mother of a 5-year-old son, Thompson will earn her Ph.D. in counseling next spring. Not bad for someone who never thought she’d attend college. 
FIESTAS:
A fifth-grade boy who hasn’t been engaged in science class suddenly perks up when the after-school lesson involves a visit to a local bakery where he gets to use a mortar and pestle to grind wheat berries into flour for bread making. It turns out the boy helps his Latina grandmother grind corn at his home. Instantly, science is connected to something he can relate to, and a light bulb blinks on.

A third-grade girl from the Dominican Republic visits a local tire shop where she gets to use shiny tools like pressure gauges and tire-tread measuring devices, and a connection is made in her young mind that math is all around her and much more than the inky symbols printed on worksheets in a classroom.

A group of elementary students learn fractions at a Mexican bakery where they slice up pastries, weigh the portions on a scales, then literally eat what they’ve learned. A weightlifter pumping iron at a local gym fascinates students, and a science lesson about force and weight is driven home. At a laundromat, students get to disassemble a washing machine and learn about pulleys. A local car dealership serves cookies while students inspect a car that mechanics have put on display in preparation for an after-school lesson.

These are all examples from FIESTAS, an after-school learning program/teacher preparation course/research project in the STEM fields — science, technology, engineering and math — that was launched four years ago by College of Education faculty SueAnn Bottoms and Kathryn Ciechanowski and 4-H faculty Ana Lu Fonseca. Since then, the project has grown into a multifaceted enterprise that could become a national model for successful STEM learning and teacher education. FIESTAS stands for Families Involved in Educational Sociocultural Teaching and STEM. As the name implies, it is about engaging students from diverse sociocultural backgrounds in STEM learning by involving their families and tapping local businesses to serve as real-world classrooms and hands-on labs.

The experiences help students — and future teachers — see how STEM subjects are woven throughout local communities. FIESTAS is also demonstrating that successful STEM teaching depends on a wide range of factors that go well beyond the walls of any school classroom.

FIESTAS started when Bottoms and Ciechanowski partnered with two 4-H after-school clubs and later the Boys and Girls Club of Corvallis. Their goal was twofold: 1) expose underserved youth to STEM-related projects to increase interest in STEM and 2) engage pre-service teachers (PSTs) in culturally and linguistically diverse settings.
Four years later, the program has grown exponentially and is benefitting students, parents, local businesses and the 50-plus PSTs who work with students in two dual-immersion elementary schools each year.

“When we started FIESTAS, it was just two after-school clubs, but it has grown all these tentacles and taken on a life of its own because it really resonated with people,” says Bottoms. “Our PSTs find it very rewarding, and parents like it because they hear what’s going on with their kids. It’s so exciting; it keeps me going and energizes me.”

Part of what excites Ciechanowski and Bottoms is seeing how the kids — and the PSTs — connect with and learn from the local businesses.

“The community response to this has been amazing,” says Ciechanowski. “There is all this expertise in the community, and when we do a better job connecting teachers to this expertise, we are better at teaching STEM.”

The PSTs meet briefly with the community partners ahead of time to frame the lessons and offer pedagogical expertise, like how to set up activities at stations for hands-on learning.

“And then the businesses just run with it,” says Ciechanowski. “Many are surprised by how well the kids behave, but that’s one of the keys: if you engage children in real-world, authentic ways, they are learning, because they’re not just reading about it — they’re doing it in context.”

By working with people in the community who use math and science every day, the students see STEM integrated in everyday life and not something separate.

“We might not identify these individuals as scientists or mathematicians, but they are using science and math every day, so we help kids see that connection,” Bottoms says.

FIESTAS also has a diversity component aimed at helping budding teachers experience firsthand how kids from different sociocultural backgrounds learn in different ways. The program is intentionally targeted at schools with diverse student populations.

“Teachers are generally white, female and monolingual,” says Bottoms. “We help them broaden their understandings by creating equitable experiences so teachers teach better because they understand kids might not have backgrounds like theirs. Diversity is big and complex and involves religion, race, socioeconomic background and much more, and as a teacher, you have to understand that the community of children you’re teaching reflects this complex diversity.”

This diversity is also connected to families, which is why FIESTAS reaches out to include students’ families.
The mother of a fourth-grade girl told the researchers how her daughter, who “hated” math and refused to do her homework, is now telling people she wants to be an engineer when she grows up. The mother credits the change to FIESTAS, which actively works to communicate with families and sometimes sends videos of children engaged in local lessons home with students so their parents can learn, too.

“Parents are partners in this,” says Bottoms. “I always tell the PSTs that kids come with families, and every family is not like your family.”

FIESTAS also has a research component. In addition to the undergraduate PSTs, doctoral and master’s students are involved in data collection and analysis, and Bottoms and Ciechanowski have presented their findings at conferences and published in journals.

“This is a community-based research project,” says Ciechanowski.

Bottoms uses the term “praxis,” which is the intersection of theory and practice. “This is what a theory looks like when you put it into practice — an innovative way of preparing teachers to do science and math.”

The researchers have learned that exposing students to STEM in their own community sparks interest and ignites passion, and that STEM learning works best when rooted in the sociocultural relevant contexts of children’s lives. The program is also helping develop teachers who have a deeper understanding of STEM teaching, diversity, community learning and more.

“We see from our own analysis of the PSTs who are part of FIESTAS that the experience is shifting their perspectives and making a difference in how they approach teaching,” Bottoms says.

The program has been so successful and grown so fast that Bottoms and Ciechanowski are searching to find funding to hire a program coordinator and to support new doctoral students. They believe FIESTAS could be successfully replicated in other communities across the country.

“We’re underfunded because FIESTAS is so unique that it doesn’t fit into a box,” Bottoms says.

Although programs in other parts of the country include some of the elements of FIESTAS — activities like family math and science nights — no other program incorporates so many different threads or maintains such long-term connections with community partners, Ciechanowski says.

“The difference between our program and others is the level of complexity and the long-term aspect of FIESTAS,” says Ciechanowski. “Universities are often criticized for going out into a community to do research and then returning without necessarily giving anything back to the community. What we’re trying to do differently with FIESTAS is build long-term relationships that benefit all partners.”
“My parents are along with me on this college journey,” Chávez says. “It’s not just me.”

All through high school, Chávez thought about her “dream schools,” with the University of Portland topping her list. But when the financial aid offers from those schools made it clear she and her family wouldn’t be able to afford them, she registered for Chemeketa Community College and worked several part-time jobs to save for a university education.

It was at Chemeketa that Chávez discovered the College Assistance Migrant Program (CAMP), a federally-funded educational support and scholarship program that helps students from migrant and seasonal farmworking backgrounds succeed in college.

“Because my father had worked in agriculture, I was eligible for the program,” says Chávez, who was born and raised in McMinnville, Oregon, but has never been to Mexico.

The CAMP program played a key role in shaping Chávez’s educational path, inspiring her to pursue her dreams and showing how literature and education are key to empowerment.

As part of a Chicano/Latino studies class at Chemeketa, Chávez read books like Mexican Outsiders: A Community History of Marginalization and Discrimination in California, which describes how Latino students in California were severely punished for speaking Spanish. The class also required students to interview people in the Latino community and then to share what they heard in class. This helped Chávez better understand the Latino experience in the U.S.

Although no one else in her family had ever attended college, Isamar Chávez knew from an early age that she would. The eldest of four siblings, she wanted to set a good example for her three younger brothers and repay her parents “in the most genuine way possible” for all they had sacrificed for their children.

“My parents have always instilled in us that education is a way to make something better for yourself, and I’ve always taken that to heart,” says Chávez, 20. “They have given so much that I want to make the most of this opportunity and show them that their sacrifices and hard work are not going to waste.”

Chávez’s father came to the U.S. from Mexico in 1986 at age 19 to work on Christmas tree farms in Oregon. In recent years, he has built a small construction business. For many years, Chávez’s mother worked at A-dec in Newberg, Oregon, assembling dental equipment. Recently laid off, she now helps Chávez’s father with the family business.
“I started reflecting on my own educational journey,” Chávez says. “Before I started elementary school, I remember thinking that everyone would be able to speak both Spanish and English. I wasn’t able to understand everything at first, and there was a constant battle inside myself about whether or not I was even good enough to speak English because I still had an accent.”

The Chemeketa class made her think about how she wanted to contribute to her country. “What we all took away from that class was a sense of giving back to community,” she says. “I decided I wanted to provide a sense of hope for people, in whatever way that might look. Maybe that’s idealistic, but that’s gotten me to where I am now.”

Now a junior in the College of Education’s Double Degree Program, Chávez is majoring in both education and liberal arts, with a minor in peace studies.

She credits her experiences in the college with helping her develop and apply her critical thinking skills to educational settings.

“My classes here have empowered and motivated me to ask what I am willing to do to help future development of education for all students, including those I will be fortunate enough to have in my classroom some day,” she says. “I feel honored to be part of this college, which has provided me with a sense of wanting to learn more in order to come up with solutions and find ways to deconstruct barriers to education.”

Chávez hopes to one day be a college professor and do research in Latin America on the impacts of bringing literature and education to local communities.

“I’m interested in how the social sciences can be used as a tool for community empowerment and how education and literature can transform people who have been denied access and opportunities,” she says.

Her dream job?

“Who knows... maybe one day I’ll wind up working with Malala,” Chávez says, referring to Malala Yousafzaia, the 18-year-old Pakistani activist for female education and the youngest-ever Nobel Prize laureate. “I want to change the world through community organizing, literature and education.”

Chávez’s future plans include maintaining a close relationship with her family as well. During her first year at Chemeketa, Chavez’s mother also took classes, and they drove to and from the campus together.

“That changed us and how we interact,” Chávez says. “My mom reads a lot, and we talk about books. Again, it’s that access to literature and education — it’s so powerful.”

Her mother is planning to complete her GED, and her oldest brother is finishing up his first year at Chemeketa and considering attending Oregon State to study computer science.

Clearly, education is having a profound impact on Chávez and on many others in her life.
What’s the most effective way to keep youth enthused about the STEM fields — science, technology, engineering and mathematics — throughout middle school?

Hint: It’s more than just stellar schooling.

Since 2010, a cutting-edge research project studying STEM interest and participation among early adolescent youth has been quietly underway in northeast Portland’s Parkrose neighborhood.

Called SYNERGIES, the project, led by OSU free-choice education professors Lynn Dierking and John Falk, received its first grant of $2 million from the Noyce and Lemelson Foundations. The five-year study produced thought-provoking findings that were so compelling the researchers were recently awarded an additional $2 million from the National Science Foundation (NSF).

“We’re thrilled about the NSF funding that will allow us to implement what we’ve learned during the first five years of data collection,” says Dierking. “This will now be a 10-year study!”

The U.S. has invested heavily in STEM education...
in an ongoing effort to inspire more youth to pursue careers in these disciplines. But Dierking and Falk discovered that maintaining kids’ interest in STEM requires more than quality schooling. A set of findings emerged they call the three C’s:

- **Customize** learning experiences to youth interests.
- **Coordinate** what learners do inside and outside school.
- **Connect** kids’ STEM learning to family, peers and the community.

“Rather than starting with school goals like science standards, a more productive approach is to start with a learner’s interest, and then build knowledge around that,” Falk says.

Although education often focuses solely on schools, Falk and Dierking’s free-choice learning research shows that family and out-of-school learning opportunities are key to youths’ continued interest in STEM. Youth need STEM learning experiences after school, on weekends and in the summer.

The SYNERGIES project involves many community partners, ranging from the schools, 4-H and Girls, Inc. to OMSI, the Port of Portland and a local astronomy club.

“Lots of people in the education system are working hard and doing their best, but there is little synergy between parents and teachers, after-school and in-school and the school year and summer,” Falk says. “Our goal is to use kids’ inherent interests as a vehicle for building synergies in and out of school that improve STEM education.”

Researchers selected the Parkrose neighborhood because it is geographically bound by two freeways and the Columbia River, is racially diverse (residents speak more than 40 languages), poor (75 percent of students qualify for free meals) and has Portland’s highest rates of crime and unemployment. The community also welcomed Oregon State’s involvement.

“Residents of Parkrose are open to change, excited about being a community-based laboratory and committed to improving the lives of their children,” Dierking says.

If all goes as planned over the next five years, Parkrose youth, families, educators (in school and out) and community members will work together to create STEM synergy that just might become an international model for STEM success.

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**Darlene Russ-Eft**

Leading the Nation’s Oldest Program for Developing College Presidents

As head of the Adult and Higher Education graduate program, Professor Darlene Russ-Eft juggles a lot of balls, including running Oregon State’s Community College Leadership doctoral program, which is second only to Columbia University in educating community college presidents. Started 26 years ago, it is the nation’s longest-running such program, with graduates serving as presidents, vice presidents and deans at colleges throughout the U.S. In Oregon, six of the state’s current community college presidents are alumni of the program, and all graduates find jobs.

“One hundred percent of our graduates are hired, and we have many more applicants from across the country than we can accept,” says Russ-Eft.
“I call myself a missionary in my zeal for reading,” says Penny Kittle, who earned a bachelor’s degree in elementary education from Oregon State in 1983. The terms missionary and zeal seem very apropos, given Kittle’s passion for all things related to books and reading — including giving away entire libraries.

Kittle lives in rural New Hampshire, where she teaches high school English part time, serves as the school district’s literary coach and directs new teacher mentoring. In summers, she teaches graduate students at the University of New Hampshire and writes her own books, including Book Love: Developing Depth, Stamina and Passion in Adolescent Readers (Heineman)

When she’s not in a classroom, Kittle can be found globetrotting as an international reading consultant,
giving seminars in locations as geographically and culturally diverse as St. Petersburg, Russia, and Bangkok, Thailand.

And in between her travel schedule, her writing work and her teaching load, she gives away libraries to schools. Really.

The seeds for Kittle’s obsession with the power of reading and books were planted when she was growing up in Portland, Oregon, where she was literally surrounded by books at home and had a mother who read to her. She recalls walking to the Multnomah Public Library weekly to check out as many books as the library would allow.

“I was truly a voracious reader, until high school, when I had to read Pride and Prejudice,” she says. “That’s when I went dormant and played sports instead.”

But Kittle credits her early love of reading (which returned in college) with her success at Oregon State and at Lewis and Clark College, where she earned a Master of Arts in Teaching. It’s also why she’s so driven to inspire students to read and to help other teachers kindle a love of reading in their pupils.

“One of the keys to getting kids excited about reading is following their interests instead of assigning a one-book-fits-all approach,” says Kittle, who now loves Jane Austen, but knows from her own high school experience that an author might not resonate with everyone. “I have kids who hate to read, but you can shift that by having them read books they want to read.”

One of her students was disengaged from reading until she tapped his interest in history and introduced him to good books on the subject. He took off reading all sorts of historical books.

“You have to take their disengagement seriously,” Kittle says. She tells kids she can find them a book that is so good they won’t be able to put it down. It usually works, and the kids are hooked.

But getting access to the right books is often a challenge for teachers. Many school libraries are underfunded, and some schools don’t even have libraries any more. Research shows that in high-poverty communities of the U.S, there is only one book for every 300 kids.

“I believe every child needs access to books that will keep them turning pages, racing to the end, discovering new ideas and learning to understand the diversity in our world,” says Kittle, who has won numerous education awards for her work.

“All children deserve books they can and will want to read and teachers who will guide them to improve as readers. Every classroom should have hundreds of books to inspire curiosity, hope and vision for the future.”

This is where Kittle’s work giving away libraries comes in.

Three years ago, she and her husband Patrick, Kittle, also a 1983 Oregon State alumnus with a bachelor’s degree in chemical engineering, cofounded the Book Love Foundation, a nonprofit with one goal: putting books into the hands of teenagers.

Book Love awards 500-book libraries — valued at $3,800 each — to middle and high school teachers in need. The winning teachers agree to keep the library in their classroom and use it to inspire kids to fall in love with reading. Kittle suggests the books, tapping her years of experience to know which titles will resonate with young readers.

In the past four years, Book Love has given away 35 libraries and small grants totaling more than $145,000. And the word’s getting out.

“This year, we had 190 applications for the 10 libraries we awarded,” she says.

These “classroom libraries,” as she calls them, are changing the world one student at a time. One winner is an Ohio teacher in a community near a prison where children of incarcerated parents live so visitation is easier. Another is an Illinois teacher at a rural school that’s a 45-minute drive away from the nearest bookstore. This year, teachers in two Oregon towns won Book Love libraries: Salem and Forest Grove.

“My personal mission is to get books into the hands of every kid,” Kittle says. “With Book Love, we’re trying to make a small dent, hoping to grow and hit a tipping point. If we could give away 50 or 100 libraries a year, we would really start seeing some change. So we’re looking for funding. We need a Bill Gates or Oprah or a Morning Joe shot.” Book Love welcomes donations at booklovefoundation.org.

There are other library-support projects similar to Book Love, but none are doing classroom libraries aimed at individual teachers, who rave about their experiences of winning a library on podcasts Kittle records.

“Every one of their stories is inspiring,” Kittle says. “These are teachers who put their entire soul into their work and into their love of kids, and hearing what putting books into their hands does for them and their students is truly remarkable.”

Kittle’s advice to aspiring teachers at Oregon State? “Understand the endless opportunities that are there and that this is a golden few years when you’re surrounded by people interested in learning. And you can really sink into some big ideas that will impact you forever. You will always look back and say this was an important time, so make the absolute most of it. Immerse yourself in possibility.”

If Kittle’s contagious “missionary zeal” for helping kids read and love books is any indication, it’s clear she did just that when she was at Oregon State.
Some might assume the Oregon State University College of Education is all about developing stellar educators, which is true. But there’s also a very impressive research arm. Associate Dean of Research Jana Bouwma-Gearhart has plans to build on that, ensuring the college is seen internationally as an epicenter for transformative research that leads to breakthroughs in education over the lifespan.

“Our college is already an exceptional research entity – often a surprise to others at OSU,” says Bouwma-Gearhart, a science teacher who earned her doctorate at the University of Wisconsin–Madison prior to joining Oregon State four years ago. She was named associate dean last spring. “For many of our faculty, funding rates for research from external grants are as high or higher than in other colleges.”

Last year, college research revenue hit $1.5 million and Bouwma-Gearhart says the college plans to double that in the next few years by retaining and recruiting diverse researchers in key areas of distinction, boosting researcher productivity, and fostering research that’s collaborative, inclusive, and integrated.

“To stay on par with other benchmark research universities, we want to ensure our 20–plus tenure-track faculty have time to focus on research by offering a range of support, including grant support, graduate student funding, and more,” she says.

Compared to other colleges at Oregon State, the College of Education predominantly serves graduate students. Of the 977 current students, 527 are undergraduates, 338 are pursuing master’s degrees and 181 are doctoral candidates. Graduate programs include STEM Education (K–12, Collegiate and Free-Choice Learning); Counseling; Adult Education and Community College Leadership; and Language, Equity and Educational Policy.

“At the international and national recognition level, we have faculty here that people point to and say, they are the top in their field,” says Bouwma-Gearhart. “We get to build on that – people who are already known all over the world for their research. It’s very exciting.”