



**Ronald W. Marx** Dean and Professor of Educational Psychology

> The challenges we face in providing quality education for all seem to have no limit. Yet, in the College of Education we work daily to address these challenges, finding solutions that work here in Arizona, across the country, and around the world.

You will find encouragement in the stories in this edition of *Imagine*. As you will see, our students, staff, and faculty are developing new approaches to education that suggest optimism. Our faculty works on ways to address cyberbullying, the new channels for bullying provided by new digital media. We are working with school administrators across the state who struggle to provide education in high-poverty schools. We have a program in Mexico that provides educational and community development, while simultaneously educating our students on the value of intercultural understanding.

Our alumni are no less impactful. Whether it is developing policy and practice in early childhood education or working on rehabilitation programs in war-torn Afghanistan, our alumni achieve success on some of the most vexing educational challenges. And, as you will see in our Alumni News section, a degree in education can serve as a foundation for careers in religion, law, nursing, writing, and, of course, as teachers and administrators in P-12 and higher education.

You also will see the impact that private support can have on our students and programs. Just read the story about our friend Paul Lindsey, for one. As you are inspired by these stories in *Imagine*, consider how you can help through your gift to the UA College of Education.

Ronald W. Marx











# Imagine FALL 2011

#### Dean

Ronald W. Marx

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If you need this information in an accessible format (Braille, digital, tape, or large print), please contact Ana Luisa Terrazas.

#### OUTREACH

- A Pathway for Solving Social 2 Problems
- 3 Teacher Day at UA
- 4 By the Numbers

#### DONORS

- 5 The Erasmus Circle Fellows
- 6 Strengthen Education
- Help Us Meet the Challenge
- 8 The Honor Roll

#### RESEARCH & FACULTY

- 11 Research Shorts
- 12 Todd Fletcher: A Man on a Mission
- 15 Welcome!
- 16 **Grant Busters**

#### ALUMNI

- 18 Susan Helseth: A Woman on a Mission
- 22 Alumni News
- 24 Get Ready for Homecoming
- 25 McCray's Magic
- 26 Kids Key to Karp









#### On the cover:

Patricia González, former student of Associate Professor Todd Fletcher, caught this wonderful shot of three children ready to take flight in Cajones, Mexico. Turn to Page 12 to find out more.

#### Fostering Relationships OUTREACH

by Ana Luisa Terrazas

## A Pathway for Solving Social Problems



oing something for others is not new to Paul Lindsey. "I remember running food drives in high school and scholarship drives at the UA, but that was other people's money. Now, I can be more direct and focused," says Lindsey, a Buckeye, Arizona, native.

Lindsey grew up in Germany and Phoenix and attended the UA on a series of small scholarships. He worked in Tucson's mental health field and became the founding board president and, eventually, executive director of COPE. He later became a commercial real estate broker and started Chapman Lindsey Commercial Real Estate Services. He then purchased Coldwell Banker Success Realty and grew it from three branches and 200 agents to nine branches and 600 agents, plus a property management company and a title insurance agency. He sold all three in 2005. Today, Lindsey owns Arizona Stagecoach and Salon Nouveau, plus he is an investor in several other Southern Arizona companies.

Then there's the philanthropy. "I never imagined I would have much wealth. We were not wealthy at home," says Lindsey. "But involvement in the community was always stressed. Through a series of lucky breaks and a few good decisions, I am in a position to pay back some of the good luck I have enjoyed in the past.

"I have always considered education as the only true pathway for solving some of the social problems that are complicating our lives as Arizonans and Americans."

Which brings us to the college's Paul Lindsey Internships in Education, Lindsey's brainchild.

"I got the idea for this program through a series of discussions with UA College of Education leadership. So much of education training is in the classroom, and rightly so, but there are many other forums where a welltrained teacher can have an impact. This is in keeping with my passion for bringing education into the community in a direct way, a little outside the traditional model."

Lindsey interns build leadership and management skills through real-world experiences via public educational outreach programs.

Aaron Hoholik, who will receive his master's degree this semester, was a Lindsey intern with the International Rescue Committee Tucson. It was a good fit. Now, he's the youth program coordinator and he's hosting his own Lindsey intern.

"Collaborating with local refugee youth, I was able to use all of the tools I learned in my classes. I have continued to build upon my experience, which has allowed me to share my experience back in the classroom," Hoholik says.

We hope the idea takes off elsewhere. "Any community and any educational institution would benefit from this sort of program. I would be thrilled to help replicate it elsewhere," says Lindsey.

Sounds like a true entrepreneur — and a true philanthropist.

Kathryn Zaleski interns with the Iskashitaa Refugee Harvesting Network. "One of the refugees from Congo, whose entire family is highly involved with Iskashitaa, tailored the dress for me with leftover fabric I brought back from Tanzania," she says.

**Director of Education Outreach Sara Chavarria** 520-307-0963 spchavar@u.arizona.edu



# Teaching!

And that's one of the reasons we were honored to thank all teachers with Teacher Day at UA in April.

For the first time, the open house for teachers and their families was held on campus in celebration of National Teacher Appreciation Week. As you can see by these photos, the event was a smashing success. Along with Tucson Values Teachers, we offered a treasure chest of goodies plus free admission to UA museums, galleries, and science centers for all teachers and three members of their families. Now, we're gearing up for next year. Be sure to join us, so you don't miss out on all the fun!

## Teacher Day at UA 2012

April 28 10 a.m. to 2 p.m. on the UA Mall (in front of the Flandrau Science Center)











# By the Numbers

Number of days it took recently retired Professor Darrell Sabers' family, friends, and former students to donate \$20,365 to establish a scholarship in educational psychology in his honor

80

Eighth-grade students who have participated in our Passport to High School program, which just won a \$10,000+ Tohono O'odham grant!



29

Percentage of the UA budget that comes from state taxes, student fees, and investment earnings. The remaining 71 percent must come from private gifts and research grants.



30,000 Children's books

Childrens books given to the college's Worlds of Words International Collection this year



356
Students who walked in
May's College of Education
convocation ceremony



107,680

UA alumni in Arizona



316

College of Education students who received scholarships supported by private donors

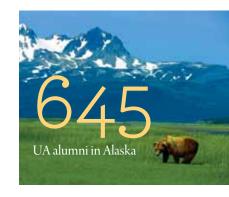


People who attended the 2011
Annual Scholarship Donor
Appreciation Breakfast

\$370,000

Total amount of scholarships we distributed last year

\$1,346
Average graduate
scholarship



\$977

Average undergraduate scholarship

## Building Dreams **DONORS**

#### 2011 Erasmus Circle Fellows



#### **Professor Sheri Bauman**

Disability and Psychoeducational Studies
Sheri Bauman's record of productivity and rigorous
scholarship has earned her an international reputation.
Her research in bullying and cyberbullying culminated
in a National Science Foundation-funded conference of

international scholars, which she convened last September. This conference brought together experts in cyberbullying from all over the world to develop a common set of definitions and an international research agenda. Bauman is highly sought as a speaker for local, national, and international conferences. Notably, she is the first North American scholar ever invited to participate in the European Cooperation in Science and Technology conference. She also was filmed for a documentary on cyberbullying for SAFE Communication. She recently released a book, *Cyberbullying: What Counselors Need to Know*, and, over the past two years, she published 13 peer-reviewed papers and book chapters and has another six papers and chapters in press. She has attained these scholarly accomplishments while also serving as the editor of *Association for Specialists in Group Work*, the premier journal for group-counseling research.



## **Associate Professor Rose Ylimaki** *Educational Policy Studies and Practice*

As an associate professor in Educational Leadership, Rose Ylimaki clearly has distinguished herself as an emerging faculty leader among her colleagues and students. Her scholarship advances the study of leaders

for the 21st century, and she is involved in an international project funded by the Wallace Foundation examining school leadership models worldwide. She also serves on the editorial board of the *American Educational Research Journal*. Ylimaki recently published the book, *Critical Curriculum Leadership: A Framework for Progressive Education*, and she is the coauthor of *U.S. and Cross-National Policies, Practices, and Preparation*. Student evaluations of her courses are consistently among the highest in the department. Her positive rapport with her classroom students as well as her advisees is noteworthy. Students report that her classes are rigorous, the discussions are provocative, and coursework expectations are challenging. To quote one student, "She expects nothing less than the best from each of us and establishes an atmosphere where we truly want to deliver."



## FALL 2011 ERASMUS CIRCLE GRADUATE SCHOLARS

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Gifts to the UA College of Education exceeded \$954,000 this year, fortifying existing programs, lifting up new efforts, and, in every way, advancing the mission of this college to prepare teachers, administrative leaders, and education researchers of the highest caliber.

#### Student Scholarships

Scholarships for undergraduate and graduate students provide vital tuition assistance and, importantly, they also convey support, encouragement, and reinforcement to future teachers, administrators, and education researchers. In 2010-2011, a total of 316 students received scholarships averaging \$1,100. Imagine what scholarship support means to our students and our faculty.

#### Visual Impairment Graduate Student Assistance

Since we're home to the state's only programs to prepare rehabilitation counselors and educators of the deaf and blind, we know our impact on this community is far reaching. So, too, is the impact of the program's alumni. When funds for graduate student support did not meet spring semester needs, our visual impairment program coordinator, Professor Jane Erin, reached out to the program's alumni. A total of \$4,845 was given in support of this vital program and many of those contributions were first-time gifts.



Downing

Project FOCUS (Focusing
Opportunities with Community
and University Support)
June E. Downing Scholarship
for Inclusive Education
The Department of Disability and
Psychoeducational Studies was awarded

a \$2.5 million, five-year federal grant to develop an innovative transition program for students with intellectual disabilities ages 18-21 wishing to enter college. This fall, the first cohort of students entered the UA. To defray their tuition costs, a scholarship fund has been established with private donations. The *June E. Downing Scholarship for Inclusive Education* is named for the late Associate Adjunct Professor June E. Downing, who was a national leader and advocate in the fields of inclusive education and moderate, severe, and multiple disabilities. After an impressive career in special education, Downing moved back to Tucson and continued her professional writing, advocacy, and national and international educational consultation. A student wrote of Downing: "You pushed me to think, to ask why not, to problem solve, to make what used to be impossible, possible."

#### Early Childhood Education

A new partnership between the College of Education and the Helios Education Foundation will change the way early childhood teachers are prepared. In the collaborative project, family and community members will be included as educators of future teachers. The partnership — CREATE, Communities as Resources in Early Childhood Teacher Education — increases the likelihood that all young children in Arizona are taught by excellent teachers.

#### Literacy Zones

The Department of Teaching, Learning, and Sociocultural Studies, through its Literacy Zones programs, employs graduate students to work with area neighborhoods, bringing together community, education, business, government, and nonprofit members to enhance a culture of literacy. These programs allow College of Education students the opportunity to explore school-community relationships in neighborhoods that are ethnically and socioeconomically diverse and the chance to apply theoretical knowledge in real-life settings. Private donations supported the development of proposals for significant, multiyear funding of Literacy Zones programs.

#### Passport to High School

These week-long summer institutes empower graduating eighth-graders from low-income families to view their high school experience as the pathway to college. Future teachers encourage the eighth-graders to set lofty goals and arm them with the necessary life skills they'll need to negotiate the path to achievement. Private support allowed the eighth-graders to attend free of charge.

## Native SOAR (Student Outreach for Access and Resilience)

Private donations funded the development of a proposal for significant funding over three years for this mentoring program to encourage and support college aspirations for Native American high school students. Native SOAR will be a service-learning program that uses culturally competent, trained UA undergraduates and will include the family network as a source of strength. The proposed program comprises mentoring between undergraduate and high school students, group educational forums where UA students lead workshops for high school students, and community and family gatherings where college knowledge is shared.

#### Cooper Center for Environmental Learning

The Cooper Center is located in the foothills of the Tucson Mountains and operates as a partnership between the College of Education and the Tucson Unified School District. College of Education faculty members offer programs that provide environmental education to thousands of visitors each year. School children, adults, educators, college students, and volunteers visit this desert site to learn about ecology, science, and the beauty and wonders of the Sonoran Desert. Private donations supported these programs.

## Dean's Endowment in Education: Help Us Meet the Challenge

The UA College of Education is an indispensable and important component of the University of Arizona. The college enjoys strong support from the university and ambitious and effective leadership in our dean, Ronald W. Marx. In the interest of retaining his leadership and securing successors who will continue to cultivate the college's success, we are establishing a \$1 million Dean's Endowment in Education that will ensure leadership of the highest caliber in perpetuity.

The good news is, we are well on our way! We already have received a cash gift of \$300,000 plus a \$350,000 matching challenge. The challenge criteria are that we raise the entire \$350,000 so the endowment will be complete and that we raise it (via pledges) *before* December 31, 2011. Pledges can be paid out over three to five years.

As you can see, time is of the essence. Faculty positions supported by endowment funds are perhaps the greatest factor in securing quality, credibility, and competitive appeal. They establish the position as one of high priority for the university and reflect the incumbent as a national leader in his or her field.

It is a worthy endeavor, and this is a once-in-a-lifetime opportunity.

Your gift will help propel the UA College of Education onto the national stage and secure its continued success as a leader in educational policy, practice, and research.

Director of Development Stacey M. Turner 520-621-7143 smturner@u.arizona.edu



# The Honor Roll

#### The College of Education faculty, staff, and students appreciate these gifts received between July 1, 2010, and June 30, 2011.

For more information on any of these giving opportunities, please contact Stacey Turner at 520-621-1743, smturner@u.arizona.edu, or PO. Box 210069, Tucson, AZ 85721. If your gift was overlooked or reported inaccurately, please accept our sincere apologies and send corrections, as well.

#### PROGRAM SUPPORT

American Indian Languag Development Institute/AILDI David Harris

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**Native SOAR** Emily L. Meschter

Passport to High School Emily L. Meschter

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Yue-ting Siu

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Arizona Alpha Delta Kappa ADK Sorority

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Ora Bretall Scholarshin A gift from the estate of

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Vernon & Barbara Myers

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Pima County Retired Teachers Association

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nthropic Education

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Pi Lambda Theta Scholarship Pi Lambda Theta Sorority

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A gift from the estate of Olive Picard

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Pima County Retired Teachers Association

#### Cristina Polsgrove New Teacher Scholarshi Mario Ruiz

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#### **Clara Mabel Rentfrow** Memorial Endowed Scholarship Miss Mary Louise Rentfrow

Rodel Scholarshins for **PreService Teachers** Rodel Charitable Foundations

#### Suellen & Sharon Kay Roediger Scholarsh Patricia C. Roediger

#### Darrell L. Sabers Graduate Scholarship in Educational Psychology

This new scholarship endowment was established by family, friends, and former students of Darrell L. Sahers, honoring his 40-year career on the occasion of his retirement in May 2011.

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Martha Gonzalez

Jonathan Goodman

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Individuals who have generously included the College of Education in their estate plans

#### Therese Berg

Therese Velasco Berg Endowment for the College of Education

#### Kris Boswort

Dr. Kris Bosworth Scholarship Endowment

#### Sally Drachman

Roy Drachman Endowment for Higher Education

#### Al Fessier

Betty & Albert Fessler Memorial Scholarship for the College of Education

#### Frank Knaack

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#### Marilyn Ludwig

Marilyn Ludwig Scholarship

#### Marcia Johnson

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#### Kurt & Diane Ward

Kurt & Diane Ward Endowment

#### Doug & Karen Woodard The Dudley B. Woodard Jr.

Scholarship for the Study of Higher Education & Student Affairs at UA College of Education

\*denotes deceased

#### Research & Faculty SHORTS



UA-educated teachers perform above the state average. Not only that, our student teaching program is the only one in the state and among just 25 percent across the nation to receive a positive rating in a nationwide review of undergraduate student teaching programs.

How do we prove it? For the latter, an Arizona Department of Education survey of Arizona principals — the first of its kind — reported that UA-educated teachers repeatedly met or exceeded expectations by the end of their first year of teaching.

And the national statistics? The National Council on Teacher Quality released its report, Student Teaching in the United States, having 134 public and private college and universities on their elementary education programs. The UA received a "good" review, one of a few institutions in the southwestern region to receive either a "good" or "model" mark. Also, the UA's efforts were highlighted twice in the report.

Take a Closer Look

Young adults with intellectual disabilities have been somewhat ignored, historically.

The UA is among fewer than 30 institutions across the nation — and the only institution in the state this year — to be awarded U.S. Department of Education funding to initiate programs to support students with intellectual disabilities.

Twenty-seven colleges and universities in nearly two dozen states each will receive up to \$2.5 million over a five-year period under the federal program, launched to improve the high school to college transition for students with intellectual disabilities. Our college received the full \$2.5 million.

"We have a model of what we think is meaningful college life for students with intellectual disabilities," said Disability and Psychoeducational Studies Assistant Professor of Practice Stephanie MacFarland, the principal investigator on the grant.

MacFarland is collaborating with Dan Perino, who heads up Tucson Unified School District's Community Transition Programs to initiate Project FOCUS, Focusing Opportunities with Community and University Support.

Project FOCUS trains students in a range of skills to live and work more independently while also being socially engaged. Another key focus in the program is training students for competitive work after they graduate. This semester, 10 students, ages 18 to 21, participated in UA student orientation during the summer and took a class about collegiate life. The group also participated in campus organizations and events and began their part-time coursework.

In addition to the College of Education and TUSD, others involved in the program's planning include the state Division of Developmental Disabilities, Southern Arizona Region Rehabilitation Services, the UA Disability Resource Center, and the Sonoran University Center for Excellence in **Developmental Disabilities.** 

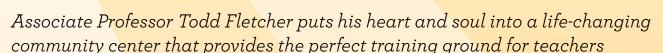
"All students deserve a chance at success in life, and this innovative program will extend those opportunities to students who have more barriers than most," said Dean Ronald W. Marx.

#### Sharing Knowledge RESEARCH & FACULTY



## AN ABANDONED HOME

## Becomes a Shining Star for Teachers and a Small Community in Mexico



by Gabrielle Fimbres

odd Fletcher is a man on a mission, devoted to helping teachers improve the school experience for special education English learners.

As part of that mission, a piece of Fletcher's heart will always be more than a thousand miles south of the University of Arizona, in rural Mexico.

Fletcher, who joined the UA College of Education in 1985, has created an educational community center in Cajones, Mexico, about 10 miles outside of Guanajuato.

For decades, he has led Verano en Mexico, a summer school program for education students. He was inspired to give back to the community that has been so hospitable to UA students and faculty.

"I had an inspiration to do something more concrete to make a difference and to do something for the community," Fletcher said. "We set up a school where international faculty can present and can really do something to impact these children and families."

In 2009, Resplandor International was born.

For the past three summers, faculty and students from around the globe — and many from the UA — have traveled with Fletcher to this lush Mexican community that has limited resources. They have formed close bonds with the children and families of the area, offering everything from early childhood education and earth sciences to cooking, guitar, and Zumba classes.

Resplandor also serves as a rich training ground for teachers and professionals. Arnulfo Velasquez, teacher in residence at the UA College of Education, who also sings with Arizona Opera, has spent two summers with Fletcher at Resplandor, teaching guitar and singing to children and adults, some with special needs.

"It was a wonderful experience," Velasquez said. "We were able to integrate music and sign language with some of the deaf kids in the community. It was tremendous."

Velasquez credits Fletcher with having the vision to build a life-changing community center — and making it happen.

#### A love for Latin America

But how did this kid from Iowa end up putting his heart and soul — and a chunk of his savings — into the abandoned home in the middle of nowhere that would become Resplandor?

Fletcher spoke little Spanish when he enrolled in the University of the Americas, a bilingual school in Puebla, Mexico, where he received his bachelor's degree in education. He fell in love with Latin America, and ended up teaching in Nicaragua.





Fletcher traveled to Peru, Costa Rica, Spain, and Mexico to help develop an evaluation tool that would be appropriate for English-learning students in the U.S.

who was looking for help in developing a

psychoeducational test in Spanish.

"I knew nothing about special education back then." Fletcher recalled.

He conducted his dissertation research in Mexico City, working in public and private schools, comparing two psychological tests — in Spanish used to measure cognitive abilities and academic achievement.

#### English learners often misdiagnosed

After receiving his doctorate in educational foundations and special education from Oregon State University, Fletcher joined the UA College of Education in 1985 to develop

in our Department of Disability and Psychoeducational Studies (DPS).

"This is kind of where bilingual education started," Fletcher said of the UA. "I was hired to develop a program to prepare teachers and develop skills in evaluating children who are primarily Spanish speakers."

Today, it is one of only a handful of bilingual special education programs in the country. "Bilingual special ed really didn't exist before this," Fletcher said. He brought in distinguished scholars who were instrumental in helping him develop the course work.

Fletcher said English learners are often misdiagnosed as having special needs because of language and cultural differences.

"These kids need to be better understood," he said. "Teachers are not Fletcher developed a core of four classes and received a federal grant to fund scholarships for students to be trained as bilingual special education teachers. "It enabled students from diverse backgrounds who might otherwise not be able to access the university to come here," he said.

Over the years, the UA graduated about 10 bilingual special education students each year. A couple of years ago, funding for scholarships was terminated, but Fletcher continues to teach. One of his classes, Cultural and Linguistic Diversity in Exceptional Learners, is required for all DPS graduate students..

To complement what his students were learning in the classroom, Fletcher developed the five-week program Verano en Mexico in 1986.









"One of the goals is to provide residents what they need to stay in their communities."

#### Being there

Every summer, Fletcher leads groups of students — from the occasional high school student to doctoral candidates — to Mexico City and Guanajuato. They live with a host family, meet with Mexican education officials, spend time in schools, and learn Spanish.



"They experience the culture firsthand," he said. "No matter how much you read and study, it's important to be there. It's a transforming experience.

"A lot of students come from schools in Mexico, so it is helpful if future teachers can have an understanding of the culture and education system there," he continued. "The whole goal was to develop cultural competency. These are not simple students to work with, and the reality is that all teachers today have that population that they are working with. It is important that they have assessment and instructional skills they need."

Jeannie Favela, assistant superintendent at Sunnyside Unified School District, said *Verano en Mexico* helped prepare her for real-world teaching. She attended the program in the late 1980s.

"I didn't know much about the education system in Mexico, especially special ed," Favela said. "That was very helpful." Favela, who grew up on the Nogales, Ariz., border, learned about where her students were coming from.

"Dr. Fletcher has mentored me and kept track of me," Favela said. "We still collaborate. I have great regard and admiration for his program."

#### Powerful work

Resplandor grew out of Fletcher's summers in Mexico and his own travels.

"When I studied in Mexico, I got all of these wonderful experiences," he said. "I want to give students an opportunity to gain what I gained and to have the opportunity to transform their lives personally and professionally. It's very powerful to work in the community, to work with families and feel like you are making a difference."

The UA community has supported the project through fundraisers and through faculty and students who teach there.

The center provides after-school programs as well as summer classes for children ages 4 to 16, as well as adults.

"One of the goals is to provide residents with what they need to stay in their communities," Fletcher said. "The families and the communities are really happy."

He adds, "They love participating at Resplandor." And it provides an excellent training ground for teachers.

"We will use the center to train teachers and professionals, locally, nationally, and internationally," he said.

Patricia González, bilingual special education teacher at Davis Bilingual Magnet School in Tucson, received her master's degree from the UA in May 2011. She said Fletcher's classes, along with her summers at Resplandor, prepared her to teach.

"Dr. Fletcher was my professor, my advisor, and he has been a strong supporter of my studies," she said. "He's been a wonderful mentor. As a teacher, I feel I have learned so much and I am more effective because of Dr. Fletcher and his classes."

At Resplandor, González, who took the photo on the cover of this year's *Imagine*, has taught everything from reading to Zumba.

"It's really an honor more than anything to be part of the program," she said. "I am so grateful and blessed to be a part of it and to know these children and families."





## NEW FACULTY: Welcome to the College of Education!

#### **Disability and Psychoeducational Studies**



Assistant Professor Michael T. Hartley comes from North Carolina, where he was an assistant professor at East Carolina University. He earned his master's degree in rehabilitation counseling from the University of Wisconsin-Madison and his doctorate

in rehabilitation counseling education from the University of Iowa. He worked as a rehabilitation counselor to assist individuals with disabilities to live and work independently in the community. His research interests are psychosocial aspects of disability and professional ethics.



Professor David L. Wodrich was the Mary Emily Warner Professor in the Teachers College at Arizona State University, where he received his doctorate and served in a doctoral school psychology training program. He also was the director of psychology

at Phoenix Children's Hospital, where he conducted research and served students with chronic illnesses and learning and behavioral problems. He is editor in chief of the *Journal of Applied School Psychology* and fellow of the American Psychological Association. His research concerns the effect of chronic illnesses on school success and attention-deficit/hyperactivity disorder.

#### **Educational Policy Studies and Practice**



Assistant Professor Nolan L. Cabrera received his doctorate from UCLA and bachelor's degree from Stanford University. His research focuses on the impact the New Start Summer Program has on low-income, first-generation, and racial minority

college students. Prior to coming to the University of Arizona, he worked on Sylvia Hurtado's NIH-funded project regarding diversifying the sciences. Other research interests include race and racism in higher education, Whiteness formation, diversity, and affirmative action.



**Ozan Jaquette** is an assistant professor of higher education whose research interests include organizational theory, postsecondary education finance, and quantitative methods. His research program analyzes the organizational behavior of

colleges and universities in relation to the pursuits of revenue generation and prestige. Jaquette, who received his doctorate from the University of Michigan, analyzes how colleges and universities generate enrollments from desired student populations.

#### **Teaching, Language, and Sociocultural Studies**

**Teacher in Residence Todd Autenreith** was born and raised in the Pittsburgh, Pennsylvania, area and moved to Tucson in 1976. He is a two-time UA alum and received a master's degree in language, reading, and culture in 1994. Since 1986,

he has worked in the Flowing Wells School District as an elementary and middle-school teacher and coach. He is the site coordinator for the Coyote Trail Methods Cohort and a language arts instructor.



Teacher in Residence Amanda Bogle taught first and second grades in the Marana Unified School District for eight years. She received her bachelor's degree in elementary education from the UA in 2004 and master's degree in early childhood education,

with a minor in literacy and language arts, from NAU in 2008.



Assistant Professor of Practice Sonya Gaches recently left the elementary classroom where she was a developer of and teacher in a first-through third-grade multiage program for 13 years. Prior to that, she was a first-grade teacher. An Arizona State

University student, she is preparing to defend her dissertation, which analyzes teacher narratives of classroom experiences. Other research interests include issues related to children's rights as associated with the United Nations Convention on the Rights of the Child.



**Teacher in Residence Kay Thill**, who received a master's degree in bilingual/bicultural education from the UA College of Education, has spent her career in kindergarten through fifth-grade classrooms in the Tucson Unified School District.

She was a math instructional support teacher in Title I schools for many years and also serves as a teaching consultant. She has presented at local, regional, and national conferences and provides professional development in mathematics instruction.



Assistant Professor Sara E. Tolbert received her doctorate in education from the University of California, Santa Cruz. While there, she focused on improving the education of cultural and linguistic minority students by improving the preparation

of teachers who serve them. Before that, she worked as a science educator with underserved communities in the U.S., Latin America, and New Zealand. Her research expertise includes equity and access in science education, preservice and inservice science teacher education, science instruction for English learners, and cultural studies of science education.



Teacher in Residence Arnulfo Velasquez prepares future teachers by introducing math methods from a classroom perspective. He received his master's degree in bilingual/multicultural education from the UA College of Education. He has been teaching math

in the Tucson Unified School District for 13 years at the middleschool level. In 2004, he was awarded the Bilingual Teacher of the Year. He is on his way to completing his doctorate degree from our Department of Language, Reading, and Culture.





Our Research Support Team continues to help the College of Education obtain impressive grants. Here are our recently funded grants:

#### CENTER FOR THE STUDY OF HIGHER **EDUCATION**

**Getting Connected:** Harnessing the Power of Social Media Technology to Enhance **Community College Student Success** Sponsor: The Bill & Melinda Gates Foundation \$735,442

REGINA DEIL-AMEN AND CECILIA RIOS-AGUILAR OF CLAREMONT GRADUATE UNIVERSITY Implements socialmedia plans in eight community-college districts to measure and assess the potential for such approaches to increase student engagement, integration, retention, and attainment.

#### **DISABILITY AND PSYCHOEDUCATIONAL STUDIES**

Project FOCUS, **Focusing Opportunities** with Community and **University Support** Sponsor: U.S. Department of Education \$2,500,000

STEPHANIE MACFARLAND An innovative transition program (for students with intellectual disabilities ages 18-21 wishing to enter college) that trains students in a range

of skills so they may live and work more independently while also being socially engaged. Another key focus of the program is training students for competitive work after they graduate.

Children's Research and Policy Studies **Project Autism** Spectrum Specialist **Tuition and Scholarship Support Grant** Sponsor: JAMM Foundation

\$37,084 RICHARD J. MORRIS Continues a doctoralstudent research training project focusing on applied

research and related policy studies on disability and juvenile delinquency, competency to stand trial in delinquent youth, and socioemotional and educational factors related to recidivism in adjudicated and nonadjudicated youth offenders.

The COMANI (Community of Support to Early Childhood, Comunidad de Apoyo a la Niñez) Project Sponsor: U.S. Department of Education

Postsecondary **Programs** \$180,000 of Special Education

development and exchange among educational institutions in Canada, Mexico. and the U.S. to build the capacity of faculty, students, and human-service professionals to work

TODD FLETCHER

Fosters knowledge

with local communities in promoting the increased participation and inclusion of children and families with and without

disabilities.

**Southwest Preparation** of Teachers of Visually **Impaired Learners** Sponsor: U.S. Office

#### Programs

#### \$799,639

JANE ERIN Prepares teachers of students with visual impairments and orientation and mobility specialists at the University of Arizona and provides a distance-education program in Nevada to prepare 10 new teachers of visually impaired students.

#### Preparation of Orientation and **Mobility Specialists in Tucson and Phoenix** Sponsor: Arizona Department of Education

\$164.531

## Grant Busters

Jane Erin
Prepares six new
orientation and mobility
specialists through a
distance-education
program based in
Phoenix, combining
face-to-face learning
and distance learning
through Elluminate.

#### Preparation of Orientation and Mobility Specialists in Tucson and Phoenix

Sponsor: Arizona Department of Education

#### \$452,490

Jane Erin
Prepares teachers
of visually impaired
Arizona students
through an ongoing
capacity-building
program that combines
onsite meetings and
distance learning
through Elluminate.

#### Rehabilitation Long-Term Training Ph.D.

Sponsor: U.S. Department of Education

#### \$149,981

LINDA SHAW, AMOS SALES
Prepares doctoral
students in the
acquisition of advanced
skills and knowledge in
rehabilitation education
and research and
encourages learning
through partnerships
with the Rehabilitation
Services Administration
and communityrehabilitation program
linkages.

#### Educational Interpreter Emphasis

Sponsor: U.S.
Department of
Education

#### \$1,190,687

CINDY S. VOLK
Provides professional
preparation at the
baccalaureate level
for high-quality

educational interpreters for deaf and hardof-hearing children in PK-12 rural and urban settings through integrated training and practice opportunities and partnerships with professional-development sites in local and regional school districts.

## EDUCATIONAL POLICY STUDIES AND PRACTICE

Statewide, Sustainable Professional Development in Principal Instructional Leadership for Arizona Tier-III Schools in High-Poverty LEAs

Sponsor: Arizona Board of Regents

#### \$1,000,000

ROSE YLIMAKI AND LYNNETTE
BRUNDERMAN
Provides ongoing, jobembedded professional
development
to principals in
assessment literacy,
curriculum, and
instruction to support
school improvement.
Incentive grants
will be awarded to
schools to support their
improvement efforts.

## **Leaders for Learning**Sponsor: Helios Education Foundation

\$40,000

interns.

ROSE YLIMAKI AND LYNNETTE BRUNDERMAN
Provides release time to working students in order to enhance their administrative internship experiences by allowing them to practice in a more authentic time frame. School districts are compensated for the substitute costs for the

#### Safe and Supportive Schools

Sponsor: U.S. Department of Education

#### \$1,200,000

KRIS BOSWORTH
Supports Arizona high schools in creating and maintaining safe, supportive, and drugfree environments and provides technical assistance to build capacity in teachers, counselors, and administrators to continue, adapt, and expand prevention interventions.

#### TEACHING, LEARNING, AND SOCIOCULTURAL STUDIES

Communities as Resources in Early Childhood Teacher Education (CREATE)

Sponsor: Helios Education Foundation \$1,908.874

KATHY SHORT, ILIANA REYES, DONNA JURICH, CHRIS IDDINGS, AND RENÉE CLIFT Transforms early childhood teacher education by engaging early childhood educators, teachereducation students, family members, and young children in an ongoing exploration of how to develop an instructional model that promotes learning with and from families and communities.

#### Rural Primary Indigenous Education for Educational Technical Supervisors of Mexico

Sponsor: Mexican government (Secretaría de Educación Pública) through Georgetown University

#### \$191,712

Norma González, Richard Ruíz, and Patricia Azuara Provides an intensive six-month professional training to educational supervisors of indigenous teachers in Mexico.

#### Mexican Indigenous Teachers Program

Teachers Program
Sponsor: U.S. Agency
for International
Development and the
Mexican government
(Secretaría de
Educación Pública)
through Georgetown
University

#### \$357,360

NORMA GONZÁLEZ, RICHARD RUÍZ, PATRICIA AZUARA, AND VANESSA ANTHONY-STEVENS Hosts 20 scholarship recipients in a cultural and professional exchange. Teachers serving indigenous communities in Mexico acquire new theoretical and practical knowledge that helps them improve their teaching practices.

## Literacy Communities as Global Gateways to Innovation

Sponsor: Longview Foundation for Education in World Affairs and International Understanding \$30,000

KATHY G. SHORT Supports the development of online and onsite literacy communities in K-12 settings that focus on the use of global literature to build international understanding. Examines the ways in which these communities support instructional innovation and their problemsolving strategies.

#### Bringing Global Cultures and World

#### Languages into K-8 Classrooms

Sponsor: Center for Educational Resources in Culture, Language, and Literacy \$20,000

KATHY G. SHORT Focuses on the use of Language and **Culture Book Kits** and international consultants to examine how these resources for global cultures and languages influence the instruction and perspectives of K-8 teachers and librarians related to global education and intercultural competence

## COLLABORATION GRANTS

#### Military Collaboration Multi-Disciplinary Partnerships

Sponsor: U.S. Department of Agriculture

#### \$2,000,000 Lynne M. Borden

(LEAD PI, COLLEGE OF AGRICULTURE, FAMILY AND CONSUMER SCIENCES COOPERATIVE EXTENSION), JOHN L. TAYLOR Develops and uses video techniques and observation instruments for research, professional development, and the evaluation of youth programs on and off military bases around the world.

Mexican Teacher
Study: Teacher
Preparation with
Attention to Inclusion:
Curricular Evaluation
of Special-Education
Licensure (Formación
Docente para la
Atención de la
Integración Educativa:
Evaluación Curricular

#### de la Licenciatura en Educación Especial)

Sponsor: Mexican Consejo Nacional de Ciencia y Tecnología Sistema de Fondos \$500.000 pesos

TODD V. FLETCHER (CO-PI WORKING WITH A TEAM OF RESEARCHERS FROM THE Universidad Autonoma DE SAN LUIS POTOSÍ, THE MINISTRY OF EDUCATION IN MEXICO CITY, AND THE NORMAL SPECIAL EDUCATION SCHOOL [ESCUELA NORMAL DE ESPECIALIZACIÓN HUMBERTO RAMOS LOZANO] IN MONTERREY, NUEVO LEÓN, MÉXICO) Focuses on surveying the first generation of graduates from special-education licensure programs in México (PLAN 2004) to determine curricular coherence for students with special educational needs in schools.

#### Arizona Master Teachers of Mathematics

Sponsor: National Science Foundation \$1,800,000

MATHEW FELTON (LEAD PI, DEPARTMENT OF MATHEMATICS), REBECCA McGraw (Department OF MATHEMATICS), ERIN TURNER, AND MARCY WOOD Provides extensive training to masterteacher fellows. Includes leading professional learning communities, analysis of authentic artifacts of practice, coaching and mentoring strategies, equity in mathematics teaching and learning, organizational structures and systems thinking, and preservice teacher education.

**Creating Connections** ALUMNI

# UCATIO



# As Assigned by Margaret Regan

# There's no such thing as an ordinary day at work for alum Susan Helseth

**SUSAN HELSETH'S** résumé lists an unusual qualification: "Experience working in conflict and postconflict environments under harsh conditions."

Helseth's not kidding. The day she was to speak with *Imagine*, Taliban suicide bombers blew up the British Council building in Kabul, Afghanistan, the city she's called home for the last nine years.

At least nine people died and 22 were wounded in the attack on the cultural center. Helseth was fine, but the planned online interview didn't take place.

Still, she said later, via email, "Kabul is relatively safe in comparison to other places in Afghanistan. There is a large military presence of both international and national forces." She and her husband live in a secure U.N. compound, and Helseth rides "only in armored vehicles to and from work."

Helseth's work has everything to do with the decade-long war, which pits the U.S., the United Kingdom, and the Afghan government against the Taliban insurgents. Helseth is a disability specialist — she earned a master's in rehabilitation counseling in 2000 at the UA College of Education — in a country where land mines have wreaked havoc on the civilian population.

The mines are concealed in places ordinary people routinely go, and about half of the 18,000 fatalities they've caused over the long years of the war were children. Even that high number is undoubtedly less than the actual death toll.

"Many people die and their deaths are not recorded," Helseth notes.

Her task is to advocate for those who survive the blasts but have lost an arm or a leg, or have become disabled in some other way. A father who has lost the arms he uses to support his family or a child who can no longer walk suffer obvious physical traumas, but the fallout is also psychological and economic.

Prosthesis technology in Afghanistan is well behind the level of high-tech artificial limbs in the West — and the country is limited by budget constraints.

"The donor countries, including the U.S., provide millions for public health," Helseth says, "but when compared to what is spent in the U.S. or U.K. on healthcare, what the Afghans can afford is small ... and must go a long way."

#### Finding ways to mitigate barriers

Formerly the deputy director of the United Nations Mine Action Centre for Afghanistan, Helseth now works for the Afghanistan Disability Support Program. She doesn't work with individual survivors; rather, she focuses on developing large-scale programs aimed at helping great numbers of people.

The goal, she notes, is "to help the government build capacities to provide for persons with disabilities."

Her work is rewarding, she says, and she's proud to watch the disability-rights movement grow in Afghanistan. Just this past June, the nation ratified a new U.N. Convention on the Rights of Persons with Disabilities.

"People with disabilities pushed, worked together, and worked with the government in very constructive ways to make it happen," she says. "I am really proud of my colleagues."

It frustrates her, though, that the wartime dangers keep her from meeting face to face with the people whose cause she champions. "I do not get the opportunity to visit with families or the beneficiaries of our activities," she says. "That saddens me as I have always enjoyed going to the field and meeting people."

Helseth speaks Dari, one of the many local languages, and as a woman living in a Muslim country, she tries to accommodate local sensitivities. She wears a headscarf out in public and dresses conservatively, in long skirts or pants, and long-sleeved tops, "although I am known to roll up my sleeves," she adds, half-joking.

But she's never experienced any discrimination at work.

"I am well respected, but I am also older — a mother, wife, grandmother these things bring me status in Afghan culture."

Gender does become an issue in her disability work. It's often hard for disabled girls and women to get the care they need, she notes. The problem is a Catch-22. After a certain age, Afghan girls, particularly in rural areas, are permitted to be taught only by female teachers. Not many get enough education to continue on to university or other post-high school diploma programs. So not only are there not enough female teachers, there are very few female medical practitioners. And just as they can't be taught by men, "women and girls cannot go to see a male doctor or physiotherapist."



"I am well respected, but I am also older - a mother, wife, grandmother-thesethings bring me status in Afghan culture."

Helseth's program brainstorms ways to go around these difficulties, adapting activities so women can participate.

"You may need to pay for a family member as chaperone to a woman attending training. You may need to provide accelerated learning programs to bring women to the same level of education as men. You may have to provide transportation and housing for women, separate classrooms, female teachers, etc.

"You have to figure out what the barriers are, then try to mitigate them."

#### A taste for traveling

Helseth didn't always contemplate working in a war-torn foreign country. As an undergrad at Arizona State University, she majored in art, specializing in ceramics and fiber arts. ("I still sew to this day," she says, and recently completed a "crazy quilt using all the bits and pieces of fabric and buttons from old clothes.")

And once upon a time, she baked cakes in her own business in New Haven, and did PR at the Peabody Museum of Natural History at Yale.

But from the time she was a child she had an international outlook.

"I had a taste of traveling when my parents joined the Peace Corps in the '70s," she says. She and her husband started out raising their three children in Arizona, but when opportunities abroad presented themselves, "we took them." The kids grew up mostly overseas.

Helseth and her husband have worked in a number of countries; she's had assignments in Pakistan, Kenya, Sri Lanka, and Ethiopia. In Islamabad, Pakistan, she managed a restaurant/ bar and the pool and tennis courts at the private American Club. And she consulted on a craft project at the nonprofit Save the Children, also in Islamabad.

"My career has been eclectic, to say the least," she says.

By the time she arrived at the UA for the master's program in rehab, though, she knew she "wanted to make my career outside the U.S. and focus on victims of war," she says. "This was after spending several years in war-torn and landmine-impacted countries" and seeing the suffering of the victims.



The College of Education prepared her for the many challenges she's faced, she says, and helped launch her career in disability awareness and advocacy.

Her supervising professor, Charlene Kampfe, who recently retired from the College of Education, inspired her "with an attitude of possibility and a connection with people that was without judgment and consideration. I find that inspiring in a world full of skeptics and pessimists."

#### Cautious optimism

In Kabul, mired in a seemingly endless war, Helseth needs that optimism. She lost a dear friend, a woman who was kidnapped by the Taliban and then killed during a rescue attempt. And now that her family includes two little granddaughters, "I think about my safety a bit more and am probably more cautious than I was before."

President Obama has promised a drawdown of U.S. troops in Afghanistan in 2012, and Helseth is as yet unsure how long she will stay.

"We will have to wait and see what comes next for me," she says, though she notes that she and her husband recently bought a house in Arizona, where their three grown children live.

In the meantime, "I am very much at home in Afghanistan," she says. And she has much to do. No matter what happens with the U.S. and its allies, landmines will remain a significant problem in Afghanistan for years to come.

"Living and working in Afghanistan is good work," she says, "and I am proud of the work I do." So are we.



Sandra "Sandy" Kornegay Metcalf '59 was elected to the Nevada State Board of Education. She is a retired secondary principal from the Clark County School District in Las Vegas, and sends "cheers" to all UA alums.



**Ernest Charles "Ernie"** McCray '60 '62 was named the 2010 Outstanding Alumni Achiever by the University of Arizona Black Alumni Club. Ernie, a UA basketball star, was honored by the UABA in a ceremony as part of Homecoming 2010 weekend, Ernie was praised for his experience as a pioneer in college athletics, exemplified in his consummate team attitude and fortitude to compete with excellence on the court, a combination that helped earn him spots in the Arizona Sports Hall of Fame, Pima County Sports Hall of Fame, and Tucson High School Hall of Fame. Fifty years ago, he scored 46 points in a UA game, a mark that still stands as Arizona's bestever. (See our profile of Ernie on Page 25.)



**Barbara Ann Marshall** Stockwell '61 was widowed in 1975, following 17 years of marriage to Edwin Stockwell. She then became the sole owner and manager of Stockwell Honey Co. of Arivaca, Ariz., founded in 1943. In 1991, she turned the business over to her son and his family. Barbara has been a member of the Pima **County Cooperative** Extension Board of Directors since 1978, serving most years as an agriculture rep, and now is an alternate. She's also been a board member of Trico **Electric Cooperative** since 1979, the Southwest Transmission Cooperative since 2001, and the Grand Canyon State **Electric Cooperatives** Association for many vears. In addition. Barbara has been a 4-H leader for 28 years and she is a 45-year member of Cooperative **Extension Homemaker** Clubs (now the Family and Community **Education Association**) at local, county, and state levels. She is very involved in the Arivaca

community (60 miles from Tucson) and enjoys reading, travel, and walking. Barbara writes, "It's been a great and busy 50 years — no complaints!"

Leticia R. Amador

'63 is the coauthor of Becoming Human: Just Saying You're Human Doesn't Do It. In the book, "human" is not used to simply mean Homo sapiens, but to meet certain criteria distinct from that found in animals, namely the ability to care for others beyond the ability of animals. The book means to trigger a social movement to remove the ignorance Leticia believes most people have about our species' genetic "animalness." She writes, "The major reason for our ignorance is that most of us interact (feel, think, and behave) as 'animal beings,' with only the instincts inherited from animal nature. Although we are not common animals, reality dictates that our dominant heritage is that of animal nature." Becoming Human further poses that we are a unique "transitional" species with the potential to produce not only members with the limited caring of animal beings, but also members with the expanded caring of human beings.



**Vivian Carole Smith** '69 '72 '80 '86 won the Arkansas Tech **University Faculty** Award of Excellence for Teaching, Vivian Carole is an associate professor of middle-level education. She has been elected to serve as the chair of the Arkansas Tech Faculty Senate during the 2011-2012 school year.



Thomas "Tom" Tyree '70 '76 was given the University of Arizona Alumni Association Public Service Award for his outstanding dedication to the public at a UA College of Agriculture event held in Yuma in January 2011. Tom (shown at far left in the photo) is the Yuma County Superintendent of Schools. His office sets school-district tax rates, assists in all school board elections, records teacher certification and homeschooling services, and administers alternativeeducation programs to

youth at risk in Yuma County.

Alison Winfree-Pickrell '78 retired in 2006 after teaching special education in the Iredell County (North Carolina) school system for 30 years. Since that time, she has published four novels, with a fifth on the way in 2011. Four out of five of these books have a specialneeds person as a main character and incidents drawn from Alison's many years of teaching. Videos and info about each book and Alison are on her website. alisonwinfreepickrell. com, and her publisher's website, oaktara.com.



**Jess Andrew** Kemberling '79 '81 is the coauthor of a book, Making Stewardship a Way of Life: A Complete Guide for Catholic Parishes, published by Our Sunday Visitor. Andrew shepherds more than 4,600 families at St. Thomas More Parish in Centennial, Colo. Under his leadership, St. Thomas More has received numerous awards, including the International Catholic Stewardship Council

**Archbishop Thomas** J. Murphy Memorial Award for outstanding work in promoting stewardship as a way of life. One of 10 children, Andrew was born in Tucson and entered the Holy Cross Abbey in 1981 and made his solemn vows in the Benedictine order in 1985. He received his master of divinity degree at St. John's University in Collegeville, Minn., and was ordained in June 1988 by Bishop Arthur Tafoya of the Diocese of Pueblo.

Tina Corbett '82 is a teacher at Abia Judd Elementary School in Prescott, Ariz., where she proudly displays her UA memorabilia collection in her classroom. Tina is retiring after 36 years of teaching and plans to take some of her prized UA collection with her and to "will" the remainder to other UA alumni who are teachers in the Prescott area, promoting Wildcat spirit even further. Tina has served for 20 years as president of the UA Alumni Association Prescott chapter and recently helped host the UA Department of Athletics annual Road Trip to Prescott, attended by a standingroom-only crowd of Wildcat fans.



Susan Brichler Trujillo '95 '98 practices in health law and

litigation and dispute resolution in the Phoenix office of Quarles & Brady. Susan's practice includes the representation of commercial healthcare clients in contract and employmentdiscrimination disputes, licensing and regulatory issues, and the representation of commercial clients and healthcare professionals before state agencies and regulatory boards. Susan has won the Arizona State Bar President's Volunteer Service Award for her pro-bono work with the Wills for Heroes program. The program operates in 10 states, providing free wills, living wills, and powers of attorney for first responders including police officers, firefighters, corrections officers, and paramedics. Wills for Heroes volunteers are attornevs that donate more than 100 volunteer hours to the program.



Avery R. Moon '98 and Shannon S. Moon '98 welcomed their first daughter, adorable Marin Churchey, in August 2009. This Wildcat family resides in the San Francisco Bay area.



Sarah K. Rees Edwards '00 was given a University of Nebraska at Omaha (UNO) Alumni Association Alumni Teaching Award at the Faculty Honors Convocation Breakfast in April 2011. The award honors distinguished classroom teaching. Peer committees in each college choose recipients, each of whom receives a \$1,000 award and a commemorative tablet. Sarah is an associate professor in the department of teacher education in the UNO College of Education. Her primary focus is secondary literacy and culturally responsive teaching. Sarah coordinates undergraduate and graduate English language-arts programs at UNO. She also is the cofounder of Metropolitan English Teacher Link and organizes the College of Education Culture Walks.



Steven M. Corey '06 is the 27th president of Olivet College in Michigan. Prior to this appointment, Steven

served as executive vice president of Prescott College in Prescott, Ariz., since 2001. During his tenure at Prescott, Steven directed all aspects of the college's administrative and operational policies, objectives, and initiatives. He also managed the college's overall financial policies as chief financial officer. In 2006, Steven was appointed by Governor Janet Napolitano to serve on the Arizona State Commission for Postsecondary Education. He also has been an active member in the Prescott community, where he has served on several boards. A native of Clovis, Calif., Steven's family includes his wife, Traci, and their daughter, Karli.

Mackenzie '07 '10 lives in a central-Mexico village. She recently attended the Reforma Conference in Denver, where her book, Empowering Spanish Speakers — Answers for Educators, Business People, and Friends of Latinos, published in 2011, was presented. Jacqueline also spoke at the UA College of Education and Center for English as a Second Language on how to overcome academic hurdles for Spanish speakers by having educators apply cultural-sensitivity techniques.

Jacqueline Zaleski



Nicole Leetch Clark
'08 is shown (standing
at the far right in a red
T-shirt) with her 6thgrade class of future
'Cats in the Paradise
Valley Unified School
District #69. Nicole's
class sings Bear Down,
Arizona, with great
Wildcat enthusiasm!



Brianne M. Gonzales '08 and Joshua E. Laster were married in June 2010 at the Paris hotel in Las Vegas. The wedding party, in UA navy blue and cardinal red attire, included Alexandra Pesqueira '09 and Ashley Harris '09, current Wildcat Michael Gonzales, and Alina Alvarez and John Wyman. The proud parents of the bride are **Edward Gonzales '73** and Barbara Gonzales '75 '77. Brianne and Joshua live in Las Vegas, where Brianne has returned to college to pursue a nursing degree and Joshua is a staff sergeant in the United States Air Force.

We want to hear from you!

Send your news to anat@u.arizona.edu

## Alumni Gathering



Celebrating graduates with 50+ years as alumni

You're invited to join us as we welcome graduates from the Class of 1961 to the Golden Circle

Enjoy a continental breakfast in the Worlds of Worlds International Collection of Literature for Children and Adolescents College of Education, Room 453 Friday, November 4, 8-10 a.m.

 College update from Dean Marx
 2011 College of Education Alumna of the Year, Jane Russo '72, '77
 Alumni awards

Space is limited; reservations are necessary!

Contact Jennifer Varela at jenvarela@email.arizona.edu or 520-621-3413, or mail your request to P.O. Box 210069, Tucson, AZ 85721



f you're passionate about education and want to stay involved with the College of Education, join the College of Education Alumni Council.

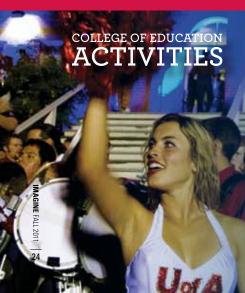
#### **ALUMNI COUNCIL MEMBERS:**

- Receive regular mailings about college events
- Serve on regional committees to plan programs for alumni and current students
- Conduct annual award programs for outstanding educators and school volunteers
- Participate in public programs to inform citizens of issues affecting K-12 and higher education
- Plan Homecoming activities for the college
- Conduct social and professional development events for students and graduates
- Have fun together!

Meet us at the College of Education tent during Homecoming, or contact Alumni Council President Tyrone Copeland at cpcph@aol.com.



## UA Homecoming 2011 | Red, Blue, & Bold! | November 4 and 5



FRIDAY, NOVEMBER 4

10 - 11 a.m.

Collegiate Showcase featuring Professor Sheri Bauman, Bullying & Cyberbullying: What Can We Do? College of Education, Room 453

2 – 4 p.m.

Tours of Worlds of Words International Collection of Literature for Children & Adolescents and the Wildcat School

#### SATURDAY, NOVEMBER 5

Five hours pregame

Tents on the Mall and Scholarship Raffle, including the famous College of Education all-day piñatas, face painting, and giveaways

Cooper Center for Environmental Learning

Passport to High School

Alumni Council

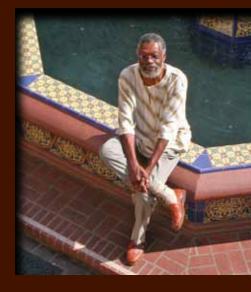
For updates, go to www.coe.arizona.edu/homecoming

## McCray's Magic On the court and in the classroom

by Gabrielle Fimbres

As a little boy growing up near downtown Tucson, Ernie McCray couldn't wait to start kindergarten.

But when the day came, he was disheartened by crying classmates and dull lesson plans. He suggested more energized methods of instructing to his teachers, who didn't take too kindly to the advice.



McCray knew from that moment that he wanted to teach. "It was a calling," he said.

This University of Arizona College of Education grad has much to be proud of. He was a teacher and principal for 37 years. He made connections with children with serious emotional problems and impacted countless young lives.

And then there's the record.

McCray, the second African American student to play basketball at the UA, set the school's single-game scoring record with 46 points in a 104-84 win over Cal State-Los Angeles on Feb. 6, 1960. The record stands today.

"I was shooting inside, outside, all over the place," recalled McCray, 73. "I was pretty much bouncing them off my head."

Pretty big stuff for a kid who had to take a back seat to Anglo children at the Saturday morning movies.

McCray started out life in Tucson, the son of a musician father and a college-graduate mother who worked as a custodian. His father wasn't a daily part of his life, but McCray always knew he was loved.

"I had a great time in the neighborhood," he recalled. "You had so much love and support."

As he got older, he couldn't understand the segregation that surrounded him. "I would go into restaurants thinking maybe this time they would serve me. It was confusing for me because I was valued and treasured at home. How can I be loved by all these people in my home and in my neighborhood but then all these other people hate me?"

He saw that hatred eat away at friends. "People were overdosing on heroin. They felt worthless. I never believed all those things people would say."

McCray knew he had great things in his future, including college. His passion for basketball earned him a full scholarship to the UA.

McCray received a bachelor's in education in 1960 and a master's in elementary education in 1962 from the UA. He has spent the past half-century in San Diego.

He was drawn to alternative methods of teaching and used acting and rapping skills to engage kids. "If we're not excited about teaching, how are we going to get kids excited?"

This great-grandfather lost his wife of 34 years, Nancy, a few years back. He is involved in numerous projects and stays fit through long walks and dancing to Prince in his living room.

His philosophy on life is simple: "If you love people and respect people and carry yourself in a respectful way, it will come back to you."

Key to Karp

aomi Karp has spent a lifetime improving education for our nation's children. For her achievements, the University of Arizona College of Education alumna was recently awarded an honorary doctor of humane letters degree.

But you won't find Karp resting on her laurels.

After a decade of teaching special education in Tucson and a quarter century in Washington working to improve education on a federal level, Karp is back home bolstering early education.

"I firmly believe that all children are equal and all children can learn if we give them the right support," said Karp, who is directing a grant to build a high-quality regional professional development system for teachers of young children.

"To this day, when I look at a child care center, I ask myself, 'Would I want my child or a child I know there?' If the answer is no, I don't think any child should be there."

Karp, a Tucson native, is the daughter of pioneering attorneys Rose and James Silver. Her mother was the second woman to graduate from the UA College of Law. Her father helped start the Beacon Foundation.

Karp earned a bachelor's in psychology from the UA in 1964 and a master's in education in 1966. She taught children with emotional issues in Tucson until the late 1970s when her husband, Gene Karp, was called upon to serve U.S. Sen. Dennis DeConcini, D-Ariz., in Washington, D.C.

"I thought we were going for two years and we were there for more than 26," she recalled.

She became a program specialist with the National Institute on Disability and Rehabilitation Research in the U.S. Department of Education. She was later named director of the National Institute on Early Childhood Development and Education.



"I loved seeing how you could take an idea, put a little money behind it and see how it would make a difference."

Karp was involved in a project to develop educational television programming, resulting in PBS shows *Dragon Tales* and *Between the Lions*. Old episodes of *Sesame Street* were restored and new ones were developed.

The Karps returned to Tucson in 2003, and she now works for United Way, overseeing a \$2 million First Things First grant.

"We are bringing up the education level of early childhood ed teachers," she said. "A well-educated teacher impacts program quality and children's outcomes."

Karp said the nation is losing generations of children, many new to this country, through poor education. "All of us children of immigrants have a special duty to support children of immigrants today. Public school is the vehicle to do that."

She credits her education for helping her make a difference. "I could not have gotten where I am without my UA background."



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And don't forget about *Education E-News*, too. That's our monthly e-newsletter chock full of everything happening at the College of Education. Send an email to anat@u.arizona.edu, and you'll know what's up in no time!

# magine Asearch

TAKING EDUCATION IN NEW DIRECTIONS



## Imagine earch

**FALL 2011** 



#### **Editor**

Ana Luisa Terrazas

#### **Assistant Editor**

Jennifer P. Rich

- 1 Classroom Consequences of Common Pediatric Illnesses
- 3 Pediatric School Psychology — A Subspecialty
- 5 Design-Based Research in Early Childhood Teacher Education: Building a Base of Useable Knowledge
- 7 Math People: How Identity Counts for Learning Mathematics

Many areas of academic scholarship require translational research to move findings from "pure" research to application. Research in education takes problems of practice as its point of departure. This approach eliminates the gap between what scholars learn from their research and programs designed to make a difference in the lives of children and youth.

In this edition of *Imagine Research*, we present four examples of research designed to make a difference. Two of the articles are by faculty members in our school psychology program. Both address creating knowledge for educational applications about children and youth with medical problems. As these articles by Professor David Wodrich and Assistant Professor Michelle Perfect show, it is possible to address the educational challenges of children with serious health problems.

The articles by Associate Professor Ana Christina DaSilva Iddings and Assistant Professor Marcy Wood focus, respectively, on early childhood education and mathematics education in elementary schools. Both describe how research that carefully engages teachers and children in schools can result in better understanding of subtle, yet critical, aspects of learning in schools.

Our scholars in the College of Education are committed to research that improves education for all. By linking this research to our undergraduate and graduate programs, we improve education by leveraging impact through the thousands of children and youth our graduates will educate in their professional careers.

Ronald W. Marx





www.coe.arizona.edu









## Classroom Consequences of Common Pediatric Illnesses

Iwodrich@email.arizona.edu



by David Wodrich • Professor

Disability & Psychoeducational Studies

RESEARCH EXPERTISE

The effect of chronic illness on school success and related research addressing the neurosciences and student learning

520-621-7829

Statistics suggest that as many as 15 percent of all U.S. school-age children (Thies & McAllister, 2001) — or, approximately 7,500,000 students experience a significant medical illness or chronic medical condition before high-school graduation. Critically, nearly one-half of these students encounter some form of academic or school adjustment difficulties related to their medical condition. Only a tiny fraction of students with educationally threatening medical illnesses are now provided with a special class adjustment or designation. For example, the

School psychologists, such as those trained at the

skills to include students with pediatric illnesses.

University of Arizona, have begun to expand their practice

educational diagnosis of "other health impairment" remains rare and few students benefit from an individualized education plan prepared for them under the 2004 Individuals with Disabilities Education Improvement Act, which ensures an equal and appropriate education relative to their regulareducation peers.

#### **Optimizing Disease Management**

My research, often conducted with colleagues at Phoenix Children's Hospital, addresses the classroom consequences of common pediatric illnesses. This article shares a little of what we have discovered. Simply optimizing disease management (e.g., controlling blood sugars in diabetics) may make a big difference. In a preliminary study (Daley, Wodrich, & Hasan, 2006), we found that stabilizing blood sugar (by introducing use of an insulin pump in lieu of intermittent insulin injections) reduced off-task behavior during math instruction by an average of 34 percent. In a related study (Parent, Wodrich, & Hasan, 2009), we found that hemoglobin A1c, a laboratory measure of blood-sugar stability over several months, was critical. In this study,

> hemoglobin A1c values were strongly associated with teachers' ratings of classroom attention across academic subjects and moderately associated

with teachers' simple ratings of students' reading, math, and writing skills. Optimized disease control may matter in epilepsy, as well. This is exemplified in a recently completed dissertation conducted at Arizona State

University by Genevieve Bohac, who was one of my students. Bohac found among developmentally normal children with epilepsy that seizure control (number of seizures per month) predicted several important school outcomes, such as rate of attendance and scores on high-stakes tests. That is, fewer seizures were linked with better educational outcomes.



## Eliminating Limited Health Information and Negative Stereotypes

Enhancing school success is almost certainly more complex than just maximizing disease control. Bohac's dissertation on epilepsy established that teachers' perspectives and feelings also counted. She discovered that teachers' ways of thinking about epilepsy (i.e., presence of bias, negative stereotypes, limited expectations for success) explained students' achievement test scores over and above degree of seizure control. This is essential because, for many diseases, including epilepsy and HIV, limited health information is given to teachers, and negative stereotypes abound. Many teachers don't know much about even common illnesses, and many are reluctant to teach a student until they learn more about his or her particular illness (Wodrich, Jarrar, Buchhalter, Levy, & Gay, 2011). Others require direct support, such as from other professionals or supportive brochures, before feeling confident in the classroom (Wodrich & Cunningham, 2008).

## Enhancing Teachers' Knowledge and Promoting Their Confidence

Helping teachers gain information and confidence may aid the students they teach. Programs that train school psychologists to consult with teachers, help them access medical information about a student's illness or disease, and provide a liaison among medical providers, educators, and parents are other goals of the schoolpsychology training program at the UA. On the same theme, a project to enhance teachers' knowledge and promote their confidence begins this fall at the UA (Wodrich, 2011), when development commences for a web-based resource for educators that will ultimately be accessible across the U.S. The web-based program will provide essential facts about several common childhood medical illnesses that have a high probability of hampering school success. Unlike traditional, diseasespecific websites, however, this site will emphasize findings derived from school-oriented studies, and it will outline steps to maximize concerns like school attendance, academic progress, classroom work habits, and school adjustment.

#### **Moving Forward**

My colleagues and I plan to move forward simultaneously on two fronts: one is to prepare school psychologists interested in chronic medical conditions and schooling to serve as the next generation of researchers. The other goal is to prepare practicing school-psychologist practitioners who are interested in working in schools to deliver psychological services so as to optimize the academic progress and school adjustment for the legion of youngsters with pediatric illnesses.

#### REFERENCES

Bohac, G. E. (2011). Epilepsy and school performance: the influence of teacher factors and seizure control. Unpublished doctoral dissertation, Arizona State University.

Daley, K. B., Wodrich, D. L., & Hasan, K. (2009). Type 1 diabetes mellitus and school: a comparison of patients and healthy siblings. Pediatric Diabetes, 10, 554-562.

Daley, K. B., Wodrich, D. L., & Hasan, K. (2006). Cognitive and academic functioning among children with type 1 diabetes mellitus: the influence of glucose levels and stability. Journal of Pediatrics, 148, 201-206.

Thies, K. M., & McAllister, J. W. (2001). The health and education leadership project: a school initiative for children and adolescents with chronic health conditions. Journal of School Health, 71, 167-172.

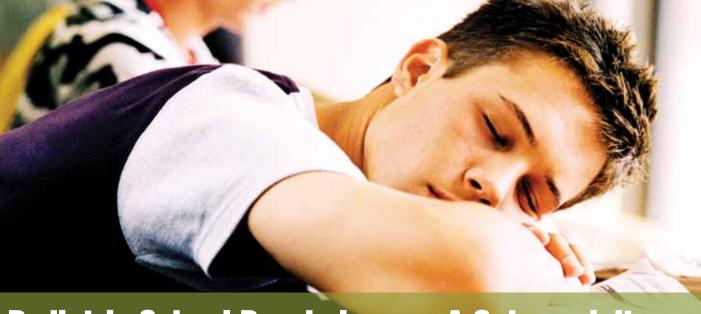
Wodrich, D. L. (2011). Helping students with pediatric illness: Creating the educating medically involved children (EDMEDKIDS) website. Supported by the Jacqueline Anne Morris Memorial Foundation.

Wodrich, D. L., & Cunningham, M. M. (2008). School-based tertiary and targeted interventions: the examples of epilepsy and type 1 diabetes mellitus. Psychology in the Schools, 45, 52-62.

Wodrich, D. L., Jarrar, R., Buchhalter, J., Levy, R., & Gay, C. E. (2011). Knowledge about epilepsy and confidence in instructing students with epilepsy: teachers' responses to a new scale. Epilepsy and Behavior, 20, 360-365.







## **Pediatric School Psychology — A Subspecialty**



by Michelle Perfect

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My research primarily focuses on health-related issues across the lifespan, with a particular focus on children and families. My health-related research, as applied to youth, fits conceptually into a subspecialty within the field of school psychology — pediatric school psychology. My most recent projects focus on mental-health service delivery by school psychologists, mental-health services for diabetic youth, and the impact of sleep in diabetic youth.

#### **Diabetes and Sleep**

Type 1 diabetes mellitus affects 1 in 357 youth in middle and high school (SEARCH for Diabetes, 2006). The main goal of diabetes management is to regulate glucose levels (blood sugars) in the body. In order to maintain good glucose control, individuals must engage in frequent glucose monitoring, administer multiple daily insulin injections or an insulin pump, and adjust insulin doses based on diet and physical activity (Fournier, De Ridder, & Bensing, 2002). This rigorous regime is quite stressful for youth. Although self-care declines

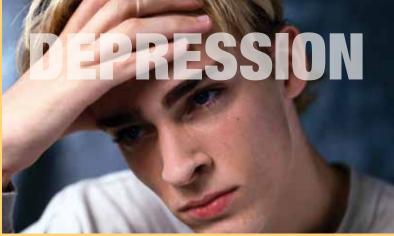
during adolescence, even youth who follow the strict protocol experience significant fluctuations in their glucose, with significant highs (hyperglycemia) and lows (hypoglycemia). Research supports that diabetic youth also may struggle with performance in school, attendance, peer relationships, and behavioral problems more than their peers in school (Wodrich, Hasan, & Parent, 2011).

Another health-related issue pertains to the role of sleep in school functioning. In fact, in a classroom of 25 students, five students may experience significant sleep problems (Mindell & Owens, 2003), including insufficient sleep duration, daytime sleepiness, and sleep-disordered breathing. Sleep disturbances may contribute to low school-performance outcomes, which, in turn, could impact adequate yearly progress, special-education referrals and status (Luginbuehl, Bradley-Klug, Ferron, Anderson, & Benbadis, 2008), or performance on psychoeducational evaluations (Buckholt, Wolfson, & El-Sheikh, 2009).

Despite the potential consequences to school performance, there are no published data merging sleep, diabetes, and daytime functioning in youth with type 1 diabetes mellitus. Consequently, I led a research team to conduct a study examining the impact of sleep disturbances on glucose regulation and daytime functioning in youth with type 1 diabetes, with a particular focus on school-related outcomes (e.g., self-reported grades, depression, daytime sleepiness, gradepoint average, absences, and state standardized test scores). The study used home-based polysomnography







(a diagnostic test to obtain sleep-related breathing and sleep architecture), actigraphy (a wrist-size device to measure sleep-wake activity), questionnaires to assess sleep, and continuous glucose monitors (a subcutaneous device recording glucose levels every five minutes), meters, and hemoglobin A1c to assess glucose control in youth with type 1 diabetes mellitus.

The youth exhibited significant sleep disturbances. Using actigraphy, more than 90 percent slept less than the recommended nine hours, 69.4 percent had sleep-maintenance problems, 69.4 percent exhibited poor sleep efficiency, and 12.2 percent had problems with falling asleep. Further, our findings indicate that both objective and self-reported sleep parameters significantly relate to diabetic youths' performance in school. Stage N2 (a lighter stage of sleep) was significantly related to hyperglycemia, parent-reported emotional and behavioral difficulties, depression, daytime sleepiness, and poor sleep quality and grades. Self-reported sleepiness was related to state standardized test scores and reduced quality of life (Perfect et al., in press).

#### **Collaboration Is Key**

My research would not be possible without collaboration with pediatric endocrinologists (Mark Wheeler, Chetan Patel, and Priti Patel) of the Angel Wing for Children with Diabetes at the University of Arizona Medical Center. The positive outcome of this collaboration was to obtain funding through a local nonprofit organization, the Father's Day Council, and for me to receive funding through the Faculty Small Grants Program to conduct the sleep study. Further, researchers (Jamie Goodwin and Stuart Quan) in the Arizona Respiratory Center shared their sleep-study equipment with me and provided the data for a matched control sample to compare the sleep of diabetic and nondiabetic youth.

#### **Unanswered Questions**

Based on our preliminary findings, several important questions remain: 1) How can sleep be assessed in a way that would be both useful and practical for school psychologists?; 2) What interventions could be implemented in a school setting to help improve students' sleep?; 3) Should sleep be routinely assessed as part of diabetes management?; and 4) Can interventions to address sleep problems in diabetic youth lead to improved glucose control as well as better school functioning? These questions will guide my future studies, including developing grant proposals to target health-related issues that impact students' school functioning.

#### **REFERENCES**

Buckhalt, J. A., Wolfson, A, & El-Sheikh, M. (2009). Children's sleep and school psychology practice. School Psychology Quarterly, 24, 60-69.

Fournier, M., De Ridder, D., & Bensing, J. (2002). Optimism and adaptation to chronic disease: the role of optimism in relation to self-care options of type 1 diabetes mellitus, rheumatoid arthritis, and multiple sclerosis. British Journal of Health Psychology, 7, 409–432.

Luginbuehl, M. L., Bradley-Klug, K. L., Ferron, J., Anderson, W. M., & Benbadis, S. R. (2008). Pediatric sleep disorders: validation of the sleep disorders inventory for students. School Psychology Review, 37, 409-431.

Mindell J. A., & Owens, J. (2003). Sleep problems in pediatric practice: clinical issues for the pediatric nurse practitioner.

Journal of Pediatric Health Care, 17, 324-331.

Perfect, M. M., Patel, P. G., Scott, R. E., Wheeler, M. D., Patel, C., Griffin, K., Sorensen, S. T., Goodwin, J., & Quan, S. F. (in press). Sleep, glucose, and daytime functioning in youth with type 1 diabetes. SLEEP.

The SEARCH for Diabetes in Youth Study Group (2006). The burden of diabetes among U.S. youth: prevalence estimates from the SEARCH for Diabetes in Youth Study. Pediatrics, 18, 1510-1518.

Wodrich, D. L., Hasan, K., & Parent, K. B. (2011). Type 1 diabetes mellitus and school: a review. Pediatric Diabetes, 12, 63–70. doi: 10.1111/j.1399-5448.2010.00654.

## DESIGN-BASED RESEARCH

in Early Childhood Teacher Education: Building a Base of Useable Knowledge



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Acting on a call for educational research to more closely address issues of classroom practice, many researchers employ design-based research methodology to investigate classroom learning in context (National Research Council, 2002). These studies, and others like them, focus on the ecology of learning, or the idea that multiple contexts interact on various levels in such a way as to impact learning (DaSilva Iddings & Rose, in press). In essence, the design-based research paradigm considers the learning process as an intricate system of relations as opposed to a mere set of practices that work in isolation.

#### **The Five Features**

There are five features central to the methodology of design-based research. First, this paradigm derives theories relating to the process of learning as well as the means by which this process is supported. Second, design-based research methodology relies upon intervention by bringing about new forms of learning. Third, design-based research has two complementary faces: prospective and reflective.

Prospectively, hypotheses are created about a specific form of learning and the means of supporting it. Reflectively, these conjectures are implemented, exposed to scrutiny, accepted, or refuted. Researchers may need to refine their initial hypotheses in light of newly collected data. Fourth, the methodology requires that researchers engage in repeated cycles of hypothesis creation and analysis. Last, as designbased research is heavily reliant on theory, the work done within this paradigm tends to focus on the direct application of seemingly abstract theoretical concepts into a specific context. In other words, the theories employed within the experiment are useful to impel not only thinking, but also practice. Through detailed description and analysis of these interventions, researchers, in collaboration with practitioners in the field, can expand the base of useable knowledge that can be directly applicable to classroom context and student circumstance.

#### Redesigning the Early Childhood Teacher-Education Curriculum

With the overarching intent to improve the educational circumstances of young children in the Tucson area and through the use of design-based methodology, the CREATE (Community as Resources in Early Childhood Teacher Education) team (University of Arizona College of Education faculty Renée Clift, DaSilva Iddings, Donna Jurich, Iliana Reyes, and Kathy Short) has embarked on a partnership between the UA College of Education and the Helios Educational Foundation. This project targets the redesign of the college's early childhood teachereducation curriculum to provide a series of course and field experiences to our pre- and in-service teachers. This engages early childhood educators (including UA faculty), university students, families, and children in exploring the ways diverse linguistic, cultural, and community backgrounds can interact to enhance literacy development for children overall and English-language learners in particular. Through many projects, early childhood teacher education is transitioning from learning about to learning with and from all stakeholders.

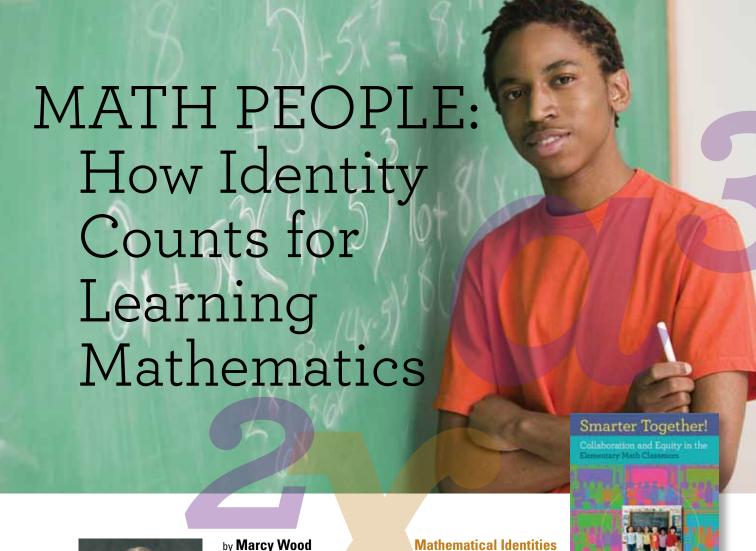
#### **Identifying Challenges**

One of the CREATE-applied projects using design-based methodology is the community-integration professional development module. During the 2010-2011 academic year, the CREATE team engaged six early childhood teachers, the director of an early learning center, university faculty, community members, families, and graduate assistants in a generative and comprehensive approach to professional development. Using a studygroup format, the team met about once or twice a month over the course of the academic year. The teachers and the director identified challenges as related to their

current practices, the early learning curriculum, and curricular materials. During group discussions, these challenges were addressed both conceptually and practically. As a result of this process, a community-situated, story-based curriculum and respective learning engagements were created to leverage cultural, social, and linguistic assets of the students, families, and communities served by the early learning center. This curriculum will be implemented in the 2011-2012 academic year.

## Connections with Families, Stories, and Communities

The discussions from the study groups served to inform the curriculum of a professional development summer institute held in June 2011, where the CREATE team invited in-service teachers, pre-service teachers, administrators, community leaders, families, UA faculty members, and other scholars to attend a three-day series of workshops. The institute was designed for all those involved in pre-service teacher preparation to enter into dialogue about the concepts that guide our work. These engagements aimed to address and illustrate connections with families, stories, and communities. Participant remarks pointed to the desire to learn more about the project and the value of this model for classrooms, families, and communities. The participants' willingness to strengthen collaborations with the college's early childhood teacher-preparation program was also evident. CREATE's efforts and commitment to improve the educational circumstances of young children will continue and progressively expand in the upcoming four years through this and other CREATE projects.



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Teacher education with a focus on elementary mathematics

This may not seem surprising. Mathematics-

education research has established many links between identity and

**Are Complicated** 

mathematical learning. For

Wood's collaborative book was just published.

Almost since people could count, we sorted ourselves into "math people" and "not-math people," with the math people possessing some mysterious connection to numbers that magically enabled quick and accurate calculations unattainable by the not-math people. However, as we have studied more about how people learn mathematics, we've learned that these two groups — math and not-math — are not biological facts (Devlin, 2000): Mathematical ability is not a consequence of DNA, but is instead more related to who people think they are. That is, being able to learn and do mathematics is closely tied to people's identities rather than their genetics.

example, studies have found that when mathematics is taught in ways that allow students to be creative and verbal, students who may be more apt to identify as literacy people find that they also see themselves as mathematical people capable of learning and enjoying sophisticated mathematics (Boaler & Greeno, 2000). However, what remains puzzling about the relationship between identity and mathematical learning is details about the mechanisms that connect the two. Why is it that seeing yourself and having others see you as a math person means that you do better at mathematics? My research seeks to understand more about these connections and to provide teachers with tools for helping more students see themselves as capable mathematical people. Rather than focus on how people talk about their identities as they reflect on mathematics. I consider how students and teachers reveal their





identities during mathematics lessons. I also examine how mathematical learning arises in these moments.

I've found that students are quite interested in talking about identities for themselves and others, in one instance spending almost 20 percent of their talk during the lesson on talk about labels for people (Wood & Kalinec, under review). Also, students' mathematical identities are complicated in ways that the categories "math person" and "not-math person" are not. Instead, students identify themselves relative to the activities they do, identifying as mathematical talkers, mathematical learners, or teachers of math.

#### **Articulating Solutions**

Students and teachers are able to shift the mathematical identities of other students through the ways in which they talk with each other. For example, one student, Rebecca, repeatedly insisted that another student, Jakeel, did not know what mathematics to do and simply needed to write down what she told him. Over and over, Rebecca identified Jakeel as mathematically incompetent. Each time, Jakeel resisted this identification, insisting that he knew what to do and didn't need Rebecca directing his mathematical work. Eventually, however, Rebecca found a mistake in Jakeel's work. She used this mistake as incontrovertible evidence of Jakeel's ineptitude. Her forceful words provoked Jakeel's shift in identity from mathematical learner to Rebecca's mathematical puppet. Jakeel no longer resisted Rebecca's directions. Instead, he asked her what to write and dutifully recorded everything she dictated without seeking to understand the mathematical ideas.

The following is a transcription of the moment when Rebecca persuades Jakeel that he messed up and he needs to do exactly what she says:

Rebecca: "You wasn't supposed to do that Jakeel. Jakeel. Jakeel, what you was supposed to do is do this."

Daren: "What we did." Jakeel: "Oh, oh."

Rebecca: "So you have to take it and rewrite it and I'll cut these out for you. Rewrite what you wrote here on there."



Jakeel: "I don't want to rewrite."

Rebecca: "Well, you have to, because you messed up."

Fortunately, this story has a positive ending. After a period of time, the teacher intervened and asked Jakeel to explain what he had written. This request reidentified Jakeel as mathematically capable, an identity that Jakeel readily adopted. This process of articulating a solution led Jakeel to a new understanding of the mathematics - an understanding that he used in later lessons to help other students make sense of the same ideas. Thus, the teacher's talk and questions supported Jakeel in reclaiming a mathematical identity that resulted in mathematical learning.

The following is a transcription of a conversation where Jakeel has a picture of a cylinder he's supposed to label. Minerva and Nerissa are in his math group, so he turns to them for help. In this transcript, Jakeel clearly identifies Nerissa as smart and Minerva as his best friend.

Jakeel: "Is this a sphere?" He holds up the cylinder and looks at Minerva. Minerva shakes her head.

Nerissa: "(It's a) sphere." Jakeel: "How do you spell it?" Nerissa: "S-P-E-R-E, sphere." Minerva: "That's not a sphere."

Nerissa: "Yes. it is."

Minerva: "It's a cylinder." She turns to Jakeel and says,

"I wouldn't listen to her."



**Jakeel:** "I don't know who I can believe". He points at Minerva and says, "You're my best friend." He points at Nerissa and says, "And she's smart."

These events suggest several important lessons about identity. First, while identities may seem fairly stable, under the right circumstances (such as Rebecca's unrelenting criticism), they can crumble. Second, teachers can be guite powerful in crafting and reinforcing students' academic identities. We know that teachers can easily transfer their mathematical anxieties to their students, especially their female students (Beilock, Gunderson, Ramirez, & Levine, 2010). My work suggests that teachers also can help students to build more positive mathematical identities. Some strategies for supporting teachers in this work are available in a recently published book from the National Council of Teachers of Mathematics. Smarter Together! Collaboration and Equity in the Elementary Math Classroom describes how teachers can help students identify themselves and others as mathematically smart and capable of learning.

#### **Understanding More About the Connections**

Students learn more mathematics when their identities encourage mathematical exploration. Jakeel had no opportunities to learn as Rebecca's puppet, but he was interested and eager to learn when treated as mathematically capable.

Understanding more about the connections between mathematical identities and math learning enables us to go beyond the categories of math person and not-math person to see how all people, including all students, can be capable math people. Our learning and our students' learning is limited by our labels. I hope to help everyone learn more mathematics by working on better labels.

#### **REFERENCES**

Beilock, S. L., Gunderson, E. A., Ramirez, G., & Levine, S. C. (2010). Female teachers' math anxiety affects girls' math achievement. Proceedings of the National Academy of Sciences of the United States of America. 107:1860–1863.

Boaler, J., & Greeno, J. (2000). Identity, agency, and knowing in mathematics worlds. In J. Boaler (Ed.), Multiple Perspectives on Mathematics Teaching and Learning (pp. 171-200). Westport: Ablex Publishers.

Devlin, K. (2000). The Math Gene. Great Britain: Basic Books.

Featherstone, H. F., Crespo, S., Jilk, L. M., Oslund, J., Parks, A., & Wood, M. B. (2011). Smarter Together! Groups, Equity, and Rigorous Mathematics in the Elementary Classroom, Reston, Va. NCTM.

Wood, M. B. & Kalinec, C. A. (under review). "What? A Black brother can't talk?": possibilities for learning mathematics in small group interactions. International Journal of Educational Research.