

THIS ISSUE

A Letter from the Dean SEHD's engaged and partnered research



Partnerships for innovation and impact

Antwan Jefferson, clinical assistant professor, with student at East High School in Denver



Thinking "STEM career" Boys and Girls Club participants engage in

Shining lights on math

Ron Tzur and his NSF grant team demonstrate that teachers' math knowledge leads to student success

Preparing future preschool teachers

Diana Schaack's research helps identify effective courses of study for future preschool teachers

10 Community garden project inspires early childhood educators

Lori Ryan's Budding Early Experiences (BEES) in the Garden project is inspiring future early childhood educators and young minds

Making preschool a priority

Ritu Chopra, Elizabeth Steed, Michael Barla and Ben Riepe partner with community colleges to prepare ECE professionals

Top seven teacher education program for "deeper learning"

CU Denver is among only seven universities chosen by *leading education experts to* be featured in a new book by Harvard Press



Alan Davis, professor, Research and Evaluation Methods with student

Performing research and evaluation

Research and Evaluation Methods program offers new MA and PhD

Effective therapy practices

Robert Allan is taking counseling practices that work for couples and applying them to individual therapy

SEHD year in review

Review some of our key accomplishments

Faculty

Meet new faculty members

The most popular alternative

CU Denver's ASPIRE to Teach continues to grow and diversify

and Leadership Academy

Serwaa Adu-Tutu, Kim Greenwell, Trevr Merchant,

Edge is published annually by the University of Colorado Denver School of Education & Human Development for college alumni and friends. Send correspondence to Julia Cummings, CU Denver School of Education & Human Development Campus Box 106, P.O. Box 173364, Denver, CO 80217-3364.



A LETTER FROM THE DEAN

Engaged and partnered research

In this issue, we introduce you to examples of the kind of research and scholarship conducted by our very talented faculty and their students. Across these stories, you might notice that the work of our faculty and students is engaged and partnered; that is, we conduct research with our partners on issues and problems that matter to our Denver and statewide communities and beyond. Engaged research means that we identify issues with our partners, design studies together and build knowledge and insight collaboratively. Whether it is the adaptive math teaching of Dr. Ron Tzur and his team or Dr. Diana Schaack's study of early childhood educator preparation, our engaged research has great relevance and impact to our partners and our research communities.

In this issue, you will learn about the two years of on-site professional development in the classrooms of an elementary school in Sheridan School District No. 2 and the parallel research effort to understand its impact on

teaching and learning. Dr. Tzur set out to challenge persistent lowachievement scores in mathematics learning among the district's elementary schools. His team worked closely with the students and teachers in their classrooms to deepen teachers' understanding of student growth, development and learning in mathematics. I won't be a spoiler—read the article to see the amazing results they all achieved together!

Dr. Schaack is playing a pivotal role in mapping the nature and characteristics of the early childhood educator workforce in Colorado, a first step toward improving the quality of the workforce. Colorado's ECE professional community, like other communities around the country, is working hard to improve the lives of ECE teachers, young children and their families. Not every state has a local researcher like Dr. Schaack to assist with just-in-time data and analysis. This is our core mission: to be an asset to Denver and Colorado.

You will also meet Dr. Robert Allan and learn about his important research on EFT, Emotionally Focused Therapy. Dr. Allan, a member of the Counseling faculty in the School of Education & Human Development, is one of only 70 therapists trained in EFT, a therapy modality conceived in the 1980s. Originally developed by Sue Johnson for work with couples who are in therapy together, Dr. Allan is adapting the work for individual therapy and conducting research on its efficacy. He is truly pioneering a new therapy approach that has been shown to be very effective for couples.

These are three examples; there are many, many more. I hope you enjoy learning about these fine scholars and their interesting research programs.

My best to our alumni, community supporters and colleagues,

Kebecea Kantor Rebecca Kantor Dean

The SEHD wants to send you our news, information about new programs and invite you to **alumni events!** Help us stay in touch with you by updating your personal email address at ucdenver.edu/alumni/updateinfo. SEHD alumni who update their information between now and January 15, 2020 will be automatically entered to win one of five \$75 Amazon gift certificates.

STEM education research with Geeta Verma

DEAN

Rebecca Kantor **EDITORIAL MANAGEMENT** Julia Cummings

WRITING Serwaa Adu-Tutu, Julia Cummings, Alex DeWind, Meme Moore, Amy Ventura, Oliver Ward **EDITORIAL REVIEW** Faith Marcovecchio

DESIGN AND PRODUCTION Rachel Olson

FRONT COVER

Antwan Jefferson, clinical assistant professor in Human Development and Family Relations and the SEHD Office of Partnerships, talks with a student at East High School in Denver.

PHOTOGRAPHY

Julia Cummings

2 EDGE MAGAZINE SCHOOL OF EDUCATION & HUMAN DEVELOPMENT

CU DENVER, SCHOOLS AND COMMUNITIES TOGETHER:



Partnerships – they are at the heart of the work of our school. As a longheld core value, our deep, sustained partnerships with diverse schools and community partners are central to enacting our mission, which is focused on educational equity. We describe our work as "engaged" – engaged teacher preparation with districts, engaged research with schools and communities, engaged service with our partners.

"We approach all of our partnership work with a strong commitment to simultaneous renewal, research and innovation, working alongside our partners to tackle big issues one child, one family, one community at a time," said Cindy Gutierrez, PhD, director of SEHD's Office of Partnerships.

CU Denver is a leading national model for how a university school can have a large impact on the region. The school has a 25-plus-year history of working in close partnership with schools and communities to support educator preparation, counseling and human development, ongoing professional learning for practitioners, research and evaluation, and technical assistance. In each case, we seek to understand the context, strengths and assets of our partners, and how our work together can positively impact everyone involved. Because of our national reputation, we have been invited by Stanford University and Bank

Street College to be part of a nineinstitution Ed Prep Lab initiative on innovation in education preparation.

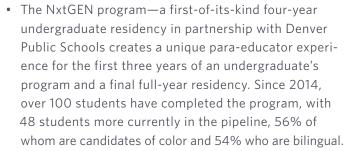
ACTION-BASED RESEARCH IN SCHOOLS: SHINING A LIGHT ON THE VERY BEST WAYS TO TEACH, LEARN AND ADVANCE.

"School partnership work helps our faculty and students get a firm grasp on what it might take to tackle the most challenging issues in education and implement innovative solutions," said Barbara Seidl, PhD, associate dean of teacher education and undergraduate experiences at CU Denver. "We embed action research/inquiry into our teacher education curriculum so that our teacher candidates are exploring critical questions about learning and

teaching alongside clinical teachers and site professors. The process provides a feedback loop that allows us to consistently innovate in the ways we teach, learn, engage and inspire."

The school's residency-based, real world teaching experiences are made possible through long-standing partnerships in Denver, Aurora, Jefferson County and Mapleton Public Schools. But the impact is extraordinary and the results transformative – both for the community and students, and CU Denver.

Ongoing research-informed processes have resulted in new solutions for P-12 students and teachers, including:



 An innovative grow-your-own undergraduate program designed in partnership with rural community colleges and local communities to create a unique solution for the rural teacher shortage in Colorado. Initially launched with Otero Junior College and La Junta-area school districts, the program has now expanded to Trinidad and Alamosa. Graduates earn a CU Denver BA and educator license without leaving their community.

EXPANDING PARTNERSHIPS WITH COMMUNITY AND HUMAN SERVICE ORGANIZATIONS

Since the start of the Human Development and Family Relations (HDFR) major five years ago, partnering with community and human service organizations has been foundational to SEHD's work. By developing and supporting direct connections between SEHD and community partners, our research and the work of community organizations become more congruent.

"I am a faculty member, the spouse of a school leader and the parent of children enrolled in Denver Public Schools," said Antwan Jefferson, PhD, clinical assistant professor in Human Development and Family Relations (HDFR) and the



Cindy Gutierrez, director of SEHD's Office of Partnerships, and Jody Barker, clinical teacher education coordinator, in partnership planning meeting with Jefferson County School District employees

SEHD Office of Partnerships. "I see the courageous work of many community-serving organizations in the metro area and how their work is closely tied to the university's desire to prepare professionals who can serve culturally and linguistically diverse families and individuals in a variety of community and social service settings."

CU Denver students in HDFR and teacher education grow professionally through field experiences and professional internships at 30-plus community organizations, including Boys and Girls Club of Metro Denver, Girls Inc., The Gathering Place and Sister Carmen Community Center. "What unifies our work across all sites is a strengths-based approach to working in the community, and this is a real value to partner organizations as well as our students," said Jefferson.

Our community partnership innovations include:

- Co-leading the Colorado node of the Urban Research Based Action Network (URBAN), which supports university-community-based research collaborations around the United States
- Hosting Community Justice Lunch & Learn events, where students and faculty engage in dialogue with communityserving partners and organizations on critical topics
- Partnering with Denver Public Schools to support the district's efforts to better align its equity efforts in support of children, educators and families throughout the district.

"Our school's partnership work is a powerful force of good in the long-term vitality of our region and state, and is an excellent example of the transformative impact the university can have," said Gutierrez.



It's not uncommon to hear elementary schoolers from Jack A. Vickers Boys and Girls Club in Denver's Northeast Park Hill neighborhood dropping complex terms like "3-D printing," "prototyping," "drones," "Raspberry Pi," "flight simulation" and "spatial visualization." This is especially true since the club's partnership last summer with CU Denver science education professor Geeta Verma, PhD, and her \$1.2 million grant through the National Science Foundation (NSF). Now, the sky's the limit in terms of their career paths.

Named for the first African American woman to receive a pilot's license, the NSF's Bessie Coleman Project called Using Computer Modeling and Flight Simulation to Create STEM Pathways, funded by the NSF's ITEST program, is providing unique learning opportunities for underrepresented students in the Rocky Mountain and mid-Atlantic regions by leveraging Universal Design for Learning. CU Denver is one of the many sites where this work is being done in close collaboration with Dr. Jacqueline Leonard (principal investigator of the grant) at the University of Wyoming.

The Vickers Boys and Girls Club was the main site in Colorado. The grant project engaged youth in top-notch, culturally responsive, educationally enriching STEM activities.

"Older youth enjoyed aviation-themed activities, from building paper airplanes to flight simulations using drones and Raspberry Pi," said Verma. "Others were drawn to computer coding, computer modeling and 3-D printing. The goal was to motivate students to become aware of, interested in and prepared for cutting-edge and innovative STEM careers."

OVERCOMING THE ACHIEVEMENT AND OPPORTUNITY GAPS

For Verma and her grant colleagues, access to these types of educationally enriching STEM activities is a civil rights issue. Her life goal is to include more girls and more elementary-aged underrepresented minorities in STEM.

"Exposure can increase students' motivations, capabilities, potential for higher education and higher paying careers. This type of STEM exposure moves us one step further in the right direction," said Verma.

Geeta Verma professor, and Ana Gadson, director of the Vickers Boys and Girls Club

"Our kids not only enjoyed their time learning... but they came away with tangible knowledge and skills."

Ana Gadson, director of the Vickers Boys and Girls Club

MEASURABLE RESULTS IN DENVER

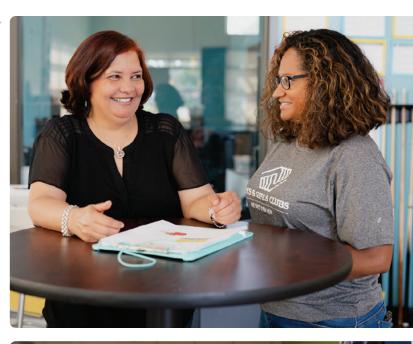
Following exposure to these unique activities, students shared their near-future plans, which included the use of computer modeling, 3-D printing and drones, indicating that the project activities made an impact on students' choices to enjoy STEM activities and consider STEM careers.

Construct	Reliability Score
Science importance and usefulness	Alpha = .883
Computer programming	Alpha = .777
Science efficacy	Alpha = .767
Technology interest and usefulness	Alpha = .883

PAIRED T-TEST RESULTS	EST RESULTS	
Beginning of camp	M = 3.04, $SD = .97$	
End of camp	M = 3.45, $SD = .92$	
t(15) = -2.18, p = .046		
t(15) = -2.18, p = .046		

IMPACT AT THE VICKERS BOYS AND GIRLS CLUB

"Our kids not only enjoyed their time learning," said Ana Gadson, director of the Vickers Boys and Girls Club, "but they came away with tangible knowledge and skills. For example, some of our kids were new to the 3-D software Tinkercad, and by the end of the program, they not only understood the applications for it but also got to create and 3-D print their very own designs. It is so important that kids walk away from experiences with not just the know-how but able to practice the skills they learned. It was also an important experience for the young ladies in our club. They were at such ease that it allowed them to be excited and engaged in the STEM activities. This allowed them to explore a new field (aviation) more freely. We are all so grateful and thoroughly enjoyed our time with Dr. Verma and the rest of her team. Thank you so much for the experience."







EDGE MAGAZINE SCHOOL OF EDUCATION & HUMAN DEVELOPMENT

SHINING LIGHTS ON MATH:

IMPROVING TEACHERS' MATH KNOWLEDGE LEADS TO STUDENT SUCCESS

"Overall, the experience helped me to understand mathematical concepts at a much deeper level. Through training, I was able to assist my students in understanding not 'just to do the math' but 'why the math.' I couldn't be prouder of my students' determination and grit." —Ken White, fifth-grade teacher, Sheridan School District No. 2

Ron Tzur, professor, Mathematics Education, with student in Sheridan School District No. 2

Imagine an elementary math classroom where games are played almost every day, with fun names like "Please Go Bring for Me," "French Fry" and "Double-Decker Bus." As the students learn math through play, teachers focus on probing for meaning and thinking: "Why did you solve the problem in that way?" "Can you think of a different solution?" "How about you figure out this fraction problem using blocks, or paper or your imagination?" To promote such a practice, teachers who participated in the National Science Foundation-funded Student-Adaptive Pedagogy (AdPed) project have received professional development to shift their teaching toward a constructivist, student-centered approach in multiplicative and fractional reasoning. As AdPed progressed, the teachers learned to recognize each student's approach to math and tailor teaching to it - rather than tailoring students to the textbook.

This type of a math classroom, which is 180 degrees different from most math classrooms, has become reality for students and teachers in Sheridan School District No. 2. The district discovered the secret ingredients to optimizing math for upper-elementary schoolchildren thanks to the collaboration with Dr. Ron Tzur, PhD, and his CU Denver team on a four-year National Science



Foundation grant, as well as a Rose Community Foundation grant.

"Our grant team loved collaborating with the Sheridan School District No. 2 because of its dedicated school team, diverse students, guts and stamina," said Tzur, professor of mathematics education at CU Denver. "They stuck with our trainings and our vigor for the needed three years We trained about 20 teachers of third through eighth graders in 15 weekend and summer professional development days. Together, we explored how a playful pedagogy can enliven their math classrooms. We looked at math activities through a lens of responsiveness to students' experiences and needs. Most importantly, we introduced to teachers how kids think about math as a basis for student-adaptive pedagogy - meeting students where they are, and then bringing their math up to speed. The results of this grant work were astounding and celebratory."

Students in the Sheridan district performed well below the state average on the Colorado Measures of Academic Success tests (including the Transitional Colorado Assessment Program and the Partnership for Assessment of Readiness for College and Careers) when AdPed was introduced, and scores did not improve noticeably for the first three years. However, in 2018-19, students in grades four and five had median growth percentiles in math of 74 and 64, respectively. A median growth percentile of 74 for the district means that their scores in spring 2019 were higher than 74% of Colorado students who had scores similar to theirs in 2018. Because this was the highest median growth percentile for any district in the state at fourth grade, it is a remarkable accomplishment. And only seven





Left: Alan Davis, professor, Research and Evaluation Methods, with student. Right: Heather Johnson, associate professor, Mathematics Education, with student

districts had a higher median growth percentile in fifth grade. Knowing that teachers attributed the growth to their own improved understanding of the math they teach, we are hopeful that the Sheridan district will see even higher scores next year, as the learning is consolidated and built upon from grade to grade.

"We couldn't be more thrilled with these results," said Tzur. "We think about each teacher and student who is impacted by this effort, and her or his trajectory moving forward. This work changes perceptions of what a capable mathematics learner looks like and where he or she comes from. We look at how confident the math teachers are, how the students have changed and how the school has changed. If we could replicate this effort in other Colorado districts, especially those with large underserved student populations, so as to grow an expert cadre of mathematics teachers trained in student-adaptive pedagogy, I believe we could change the math trajectory in our state." Our project showed that helping teachers of math who are willing to stay the three-year course of hard work at learning new ways of thinking and problem solving with their students can have exceptional results!"

CU DENVER GRANT PROJECT TEAM MEMBERS

FACULTY

Ron Tzur, principal investigator, professor, Mathematics Education

Heather Johnson, associate professor, Mathematics Education

Alan Davis, professor, Research and Evaluation Methods

Maria Uribe, senior instructor, Literacy Education

Sally Nathenson-Mejia, associate professor, Literacy Education

Mike Ferrara, professor, Mathematical and Statistical Sciences

DOCTORAL STUDENTS/ ALUMNI

Nicola Hodkowski Bingqian Wei Amy Smith Cody Harrington



Nicola Hodkowski, PhD alumna







Teachers and students at Mile High Early Learning, Lowry Campus.

PREPARING FUTURE PRESCHOOL TEACHERS

Early childhood education is a hot issue for families, educators and policymakers. Families are increasingly enrolling their children in preschools, and across the political spectrum, candidates are championing the importance of preschool for preparing young children for success in elementary school. In fact, research demonstrates that one of the best investments society can make in a child's life is high-quality early childhood education. In the United States, for every dollar spent on high-quality preschool, there is up to an \$11 return on investment.

But just what types of academic preparation and college coursework lead to excellent preschool teachers? Diana Schaack, PhD, assistant professor in the University of Colorado Denver's Learning, Developmental and Family Sciences program; Claude Messan Setodji, PhD, senior statistician and co-director of the RAND Center for Causal Inference; and Vi-Nhuan Le, PhD, senior research scientist with NORC at the University of Chicago have teamed up to research this issue, thanks to a \$1.4 million grant from the U.S. Department of Education's Institute of Educational Sciences, with additional financial support from Gary Community Investments and the Rose Community Foundation.

"This study is about recognizing the critically important role that early childhood educators play in the lives of young children and understanding the knowledge, skills and preparatory experiences they need to help children thrive," said Schaack, principal investigator of the Preschool Teacher Preparation Study. Schaack has devoted her entire career to studying the supports that early educators need to build a long-lasting and successful career in early childhood education and the policy efforts that aim to improve children's access to high-quality preschool.

Currently, there is a heated debate about the types of professional knowledge preschool teachers need and the educational



for learning-rich and emotionally supportive preschool programs.

qualifications that they should have for the job. "As a field, early childhood teachers are coming to their inhs with data on the types of sourcework and the street of the st

qualifications that they should have for the job. "As a field, early childhood teachers are coming to their jobs with a patchwork of educational experiences, ranging from no postsecondary education to advanced degrees in early childhood education," said Schaack. As a result, preschool teachers have inconsistent professional knowledge and qualifications across centers and schools. Schaack's research is designed to learn more about the educational backgrounds that best prepare teachers for their jobs.

The four-year study will draw from 120 preschool teachers throughout Colorado and 1,200 preschool-age children in

data on the types of coursework and preparatory experiences preschool teachers have completed; the quality of teachers' literacy, math, science and dual-language learning instruction; and children's learning, growth and development over their time in preschool. The study hopes to learn more about effective courses of study that lead to better teaching and learning outcomes. Schaack and her colleagues hope that the results of this study will help inform early childhood teacher credentialing systems and the types of coursework offered at institutions of higher education.

As Colorado embarks on efforts to expand children's access to preschool, it is equally important to ensure that Colorado has an early childhood workforce that is well-prepared and well-supported to provide high-quality programming to young children. "This study is important for Colorado because being able to identify effective courses of study will help us prepare excellent preschool teachers that set up Colorado's young children to realize stronger, more promising futures," says Steffanie Clothier, investment director of child development at Gary Community Investments.





Lori Ryan, clinical assistant professor, Early Childhood Education, with student at Clayton Early Learning



Nicole Rudman, EdD alumna, with children at Clayton Early Learning

The excitement increases as the children notice the possibilities that await them: yoga mats for stretching, a mud kitchen filled with fresh herbs and dried flowers, cooking utensils for the day's garden bounty and clipboards, watercolors and markers for creative expression. The educators have carefully designed these intentional learning experiences.

Joyful notes from a ukulele call the community of learners to a nearby gazebo, where they set their intentions for the day. Before long, they are off to explore all that the Discovery Garden at Clayton Early Learning has to offer.

This is Budding Early Experiences (BEES) in the Garden, a community-engaged teaching and research project launched four years ago with input from alumni and students in CU Denver's School of Education & Human Development (SEHD).

One morning a week over the summer session, educators from SEHD, and other early learning settings across the Denver metro area, join forces to connect with children in an informal space. Here, exploration is encouraged and creativity flows.

"What is so inspiring about this work is the opportunity to learn alongside children and adults, nurturing a growth mindset," said Nicole Rudman, one of three leaders of the summer 2019 project. "I am dedicated to

continuing to find innovative ways to connect and reflect with educators and children."

Historically, BEES in the Garden took place at the GrowHaus, an indoor farm in the Elyria-Swansea neighborhood. This year the location changed to the Discovery Garden at Clayton Early Learning, in an area where grocery stores are scarce and the production of healthy food is of great value.

The leaders behind the annual summer project are Lori Ryan, PhD, a clinical assistant professor of early childhood education at CU Denver who is the recipient of the 2019 Lynn K. Rhodes

SEHD's partnership with Clayton Early Learning Center emerged, in part to support the school's efforts to produce nutritious food in an area known as a food desert. The Discovery Garden, and the Moon Beam Orchard on the other side of Clayton Early Learning's campus, serve a dual purpose of providing a hands-on learning lab for the children as well as a source of wholesome, fresh food for their families. "Our school's partnership with Clayton Early Learning makes a difference in the lives of Denver's children and educators," Ryan said. "The learning experiences we create together mirror our shared commitment to the rights of all children and educators to inquire and explore, and to have equitable access to healthy and vibrant environments where they can thrive."

For the educators, the project fulfills SEHD's three goals of teaching, service and research. Each week, they are inspired by six "Big Ideas." The conceptual framework ties together outdoor experiences and lifelong learning skills, such as "Mindfulness and Movement" and "Senses and the Seasons."

In the garden, the educators have the freedom to test new processes. To

"Each moment we spend together in the garden feels intentional and peaceful..."

Endowed Faculty Award, and alumni Jenna Augustine, MA, and Nicole Rudman, EdD, who are graduates of the SEHD Buell Early Childhood Leadership Program, which also partners with Clayton Early Learning.

During summer 2019, they were joined by educators from Clayton Early Learning, Denver Cooperative Preschool and Paddington Station Preschool, along with a group of eager children ages five and younger.

explore. To observe. To play. To slow down. The hope is that they will leave BEES with a deeper understanding of diversity, community and creativity, to be applied in their own classrooms.

"Each moment we spend together in the garden feels intentional and peaceful and truly stays with me throughout the week," Augustine said. "I find that when I am with children, I often see things in a completely different way when I look through their eyes." 12 **13** SCHOOL OF EDUCATION & HUMAN DEVELOPMENT

MAKING PRESCHOOL A PRIOR

UNIVERSITY PARTNERS WITH COMMUNITY **COLLEGES TO PREPARE ECE PROFESSIONALS**

The early childhood education field in Colorado and across the nation is facing a growing and critical shortage of prepared early childhood teachers. In addition, much of the current early childhood education (ECE) workforce is not adequately prepared to fully serve all young children, especially those with disabilities.

Associate Professor of Education Ritu Chopra, PhD, and her colleagues in the School of Education & Human Development are working to solve this problem through a project called Ensuring Preparation of InClusive Early Childhood Educators (EPIC-ECE).

With funding from the U.S. Department of Education Office of Special Education Programs, EPIC-ECE seeks to address the need for a well-prepared ECE workforce to give children ages zero to eight, including those with disabilities, and their families a meaningful ECE experience. The five-year project builds on the work of The Paraprofessional Research and Resource (PAR2A) Center, which Chopra leads and which connects CU Denver education scholars with ECE faculty at four area community colleges: Arapahoe Community College (ACC), Community College of Aurora (CCA), Pikes Peak Community College (PPCC) and Red Rocks Community College (RRCC).

"Together, we are enhancing the capacity of the ECE workforce to be effective with students with disabilities and making sure that families and students are being served well and meaningfully included in education settings," Chopra said.





WHERE DO PRESCHOOL TEACHERS GO TO COLLEGE?

Twenty years ago, the National Research Council recommended that ECE teachers earn a bachelor's degree as the baseline degree. But the most common preparation pathway in the United States continues to be through the community college system. Many four-year institutions like CU Denver are forging partnerships to build from the associate degree to a bachelor's degree. So, understanding the needs of these institutions is key to properly preparing the ECE workforce.

Many community college ECE programs are working to incorporate inclusive education practices that support students with disabilities. However, currently only 17% of the national ECE workforce feels competent in supporting students with disabilities according to a national study.



"Research tells us that the current ECE workforce is not fully prepared to teach and support diverse children and families, including young children with disabilities," said Chopra, the principal investigator (PI) for EPIC-ECE.

PARTNERSHIPS BETWEEN COMMUNITY COLLEGES **AND FOUR-YEAR UNIVERSITIES**

Through EPIC-ECE, CU Denver ECE faculty are working collaboratively with Denver-area community college ECE faculty to analyze syllabi, discuss best practices and make curriculum adjustments.

Goals of EPIC-ECE, which concludes in 2023, are to:

- Identify gaps in ECE curricula and make recommendations for changes
- Update online ECE resources such as lessons, articles and videos - related to inclusion and students with disabilities
- Provide ECE faculty with coaching and professional development, including an annual summer institute
- Support high-quality field placements in inclusive settings for future ECE professionals
- Collaborate with state-level ECE initiatives to improve recruitment, preparation and retention of ECE personnel

WHEN UNIVERSITIES AND COMMUNITY **COLLEGES WORK TOGETHER**

EPIC-ECE involves faculty from six higher-education institutions, as well as federal bodies and state-level initiatives including the Early Childhood Workforce 2020 Plan and Colorado's community college ECE faculty coalition.

"Collaborating with statewide agencies will result in a broader impact and sustainability of the project activities beyond the duration of the grant," said Elizabeth Steed, PhD, associate professor of education and co-PI for EPIC-ECE.

The participating community college ECE faculty members and department chairs - Kristin Habicht and Kathleen Sutherland from ACC, Ashley Simpson from CCA, Michelle Bender from PPCC and Janiece Kneppe from RRCC - agree that EPIC-ECE will enhance curricula, better prepare students and positively impact children.

"By working with EPIC-ECE, I envision students coming in wanting to be teachers or child care providers but graduating as change agents in ECE," Simpson said.

Assistant Professor of Education Michael Barla, EdD, and Training and Technical Assistance Specialist Ben Riepe, both from CU Denver, are working on the project, as well as a consultant from the University of Denver.

"To work with such a knowledgeable team who truly are experts in the field is an amazing opportunity!" Habicht said.

SEVEN TEACHER EDUCATION PROGRAMS FOR

"DEEPER **LEARNING"**

> CU Denver is among only seven universities in the country chosen by the nation's leading education experts to be featured in "Preparing Teachers for Deeper Learning" written by Linda Darling-Hammond and Jeannie Oakes and published in 2019 by Harvard Press.

"Student collaboration is something we prepare our teacher candidates to foster -—Rebecca Kantor, Dean, SEHD

The book highlights an urgent call for teachers from diverse backgrounds to meet the demands of a complex world where knowledge and technologies are ever changing and education matters more than ever. The new mission of schools, according to the book, is to prime students for jobs and ways of life that don't exist today. Teacher quality is a critical component of the ability to succeed in this quest.

CU Denver's teacher education programs are praised for preparing teachers who understand that challenging academic content needs to be paired with engaging, experiential and innovative learning experiences in order to prepare K-12 students for college, work, civic participation and lifelong learning in an informationrich world. All teacher education students are prepared to teach with a social justice philosophy in schools that are linguistically, racially and socioeconomically

CU Denver's program aligns with the book's five dimensions of deeper learning, which are:

- Developmentally grounded and personalized
- Contextualized
- Applied and transferred
- Part of productive communities of practice
- Equitable and oriented to social justice

All of CU Denver's teacher education pathways received glowing reviews for learning that is guided by a common set of essential questions and anchor experiences; the high assessment scores of our graduates; and the program elements that "enable teacher candidates to form strong and supportive teaching-learning relationships with university faculty, teachers and leaders in their placement sites, and their peers—all of which are key to their becoming wellprepared professionals."

PERFORMING RESEARCH AND **EVALUATION: CU DENVER PROGRAM** OFFERS NEW MA AND PHD

Ongoing transformations in data collection and analysis provide researchers with more ways than ever before to develop meaningful data insights for the field of education. The Research and Evaluations Methods (REM) program at CU Denver equips undergraduate, master's level and doctoral School of Education & Human Development (SEHD) students with the skills to identify trends and share findings that will help improve systems of education in Colorado and throughout the world.

"The REM program prepares students to conduct quantitative, qualitative and mixed methods research," says Nancy L. Leech, PhD, professor of research, statistics and measurement. "We focus on applied problems: Every course includes applied data for students to work with, real-world problems to research and community members to partner with in conducting research."

While SEHD has offered a concentration in REM for many years, those interested may now receive an MA in either Research and Evaluation Methods or in Assessment, or a PhD in Education and Human Development with a concentration in research, assessment and evaluation.

Whether evaluating a single classroom or an entire district, assessing a nonprofit organization or a for-profit business, students critically examine issues that influence opportunity gaps and achievement outcomes. Through large-scale assessments, the program strives to meet the growing demand for researchers, consultants and leaders possessing both analytical. training and practical understanding of the needs of schools, teachers, nonprofit organizations, museums and others.

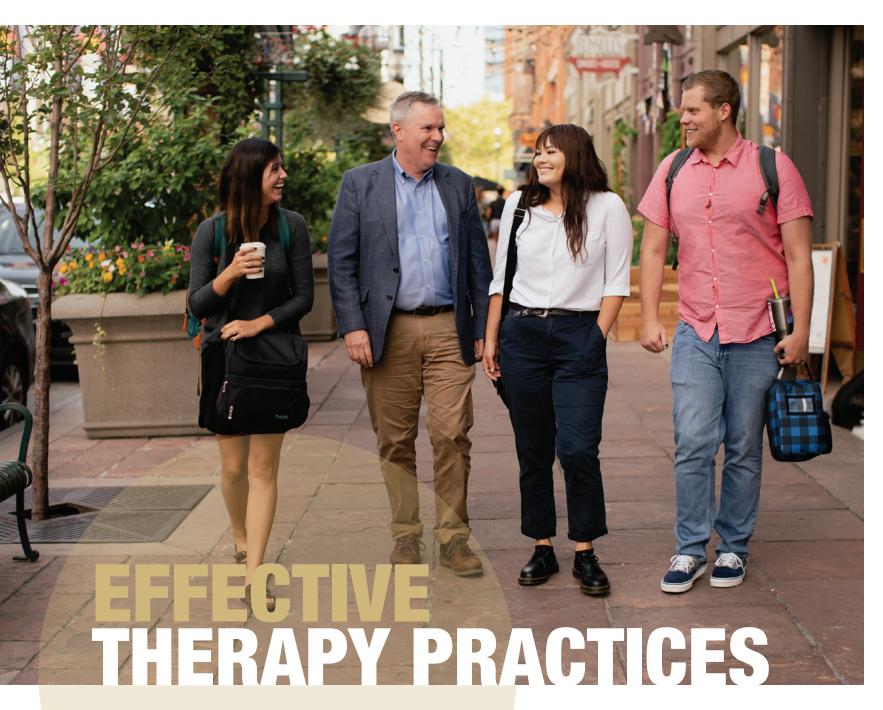
With strong faculty support, graduate students of all backgrounds and experiences enjoy a personalized approach to their individual growth and development. Close mentorships and a welcoming community foster collaboration between students and highly accomplished experts in the field.

Together, students and faculty explore beyond theory to find evidence-based practices that work.



Top: Ashley Pikus, teacher candidate Bottom: Sean Moses, teacher candidate **16**

SCHOOL OF EDUCATION & HUMAN DEVELOPMENT



With almost 50% of marriages ending in divorce, more and more American couples are choosing to enter therapy as a way to work on issues involving effective communication and trust. People often enter therapy because they are in a state of distress, experiencing heightened emotions of anger toward one another, a sense of betrayal, or they are simply seeking to improve their relationship.



Above: Robert Allan students Brianna Mai, and Bradlev Cole

Developed by Dr. Sue Johnson in the mid-1980s, Emotionally Focused Therapy (EFT) helps to reestablish positive emotional responses between couples, leading to secure bonds, and allows couples to develop trust for a healthier relationship. "I was drawn to practicing EFT because it just fit my understanding that we're social beings, we're meant to be connected to other people," said Robert Allan, assistant professor of counseling, couples and family therapy, PhD, at CU Denver's School of Education & Human Development (SEHD). Allan is one of 70 EFT-certified trainers in the entire world. For 15 years, he has worked with community agencies and in his own private practice to help couples in complex situations - many with trauma in their history - work toward more positive outcomes in their relationships.

Emotionally focused therapy (EFT) helps to reestablish positive emotional responses between couples...

A NEW APPROACH: TAKING PRACTICES THAT **WORK FOR COUPLES AND APPLYING THEM** TO INDIVIDUAL THERAPY

Although having a healthy partnership is very important, being emotionally healthy as an individual allows for effective communication and positive change in that partnership. With this in mind, Allan is working with Johnson to conduct the first trial of Emotionally Focused Individual Therapy (EFIT). "This is a first-in-the-world efficacy study and outcome-based research of EFIT," said Allan. EFIT was developed by Johnson building on 35 years of research of EFT for couples, but it applies its principles to the individual, which is something revolutionary. According to Allan, EFIT is rooted in attachment and emotion theories. Through the new model, he hopes to understand "the ways in which people have created patterns in their life for good reason, but at some point that pattern to cope or survive becomes an issue. Clients





will then create new, more adaptive ways to cope in a healthy manner. We not only look at how people relate to themselves but how they relate to others, and then use emotion as the motivator for change." Allan wants to be practical in his research. He said, "I am just one of those people who is enriched by researching what I do in therapy and also what I teach." He wants to use his findings to help other therapists become better at what they do, too.

PUTTING THE THEORY TO WORK IN DENVER

This summer, Allan collaborated with graduate assistants and SEHD alumni Lucas Schafer and Caitlin Edwards to administer a unique assessment of the EFIT theory. "It's a three-site study with Ottawa and Victoria in Canada and Denver. I'm working with colleagues in each location," Allan explained. In a SEHD classroom, local therapists versed in EFT and couples and family therapy gathered to evaluate a 65-minute recording of an EFIT session led by Johnson. They were provided no context about the session or client. This exercise was part of developing an adherence measure for EFIT. "I've been working with Sue for over the last six months or so ... the work she's done over the last 35 years is unparalleled in the field," Allan said. Tediously pausing and starting the video, therapists assessed on a scale ranging from 1 to 5 if Johnson had adhered to the model's skills and interventions while working with the client. The assessment required a lot of focus from the participants and heeded very positive feedback for Allan on his research on the EFIT approach.

Allan expressed his excitement about the whole process, saying, "We are going to learn so much about EFIT. To be able to be involved in that with literally a world-leading psychologist is exciting."

YEAR IN REVIEW



DOCTORAL GRADUATES OF COLOR HONORED

On October 22, SEHD held a celebration to honor the first class of Latinx leaders who recently earned their EdD. Anne Trujillo, news anchor from Channel 7, gave the keynote. Interested in supporting our Latinx EdD scholarship fund? Visit www.ucdenver.edu/miloscrowd.



TIRF'S 2019 ALATIS PRIZE

Sofia Chaparro, PhD, assistant professor, and her co-author, Dr. Nelson Flores (University of Pennsylvania), were named as the winners of the 2019 TIRF James E. Alatis Prize for Research on Language Planning and Policy in Educational Contexts for their article titled "What Counts as Language Education Policy?: Developing a Materialist Anti-Racist Approach to Language Activism" (Language Policy, Volume 17). The article expands on language education policy and focuses on the broader racial and economic policies that impact the lives of language-minoritized communities.



LEGISLATURE PASSES FULL-DAY KINDERGARTEN BILL WHILE GOV. POLIS SPEAKS

CU Denver's Education Policy Networking Series was more uproarious than usual April 30. Moderated by the director of CU Denver's National P-3 Center, Kristie Kauerz, EdD, attendees heard from an expert panel of kindergarten policy leaders from Colorado school districts. Governor Jared Polis described his vision for full-day kindergarten, during which his policy advisor shouted that the full-day kindergarten bill had passed. Thunderous clapping and high-fives erupted from the crowd of education leaders. "It passed! We did it," said Polis, holding two fists above his head and pumping them.



EDD HIGHER ED LAUNCH

Spearheaded by Linda Bowman, PhD. clinical professor, interim vice provost and senior vice chancellor, and currently led by Diane Hegeman, PhD, clinical assistant professor, the EdD concentration in Higher Education launched this July. Graduates will be effective leaders in diverse settings in colleges and universities worldwide. Details at: cuonline.edu/EdDHigherEd.



STUDENT-CENTERED **LEARNING GRANTS**

Carlos Hipolito-Delgado, PhD.

associate professor, was awarded a \$399,874 grant funded by Jobs for the Future. The Student-Centered Learning grant investigated how students can be supported to take ownership of their learning and how learning can occur anytime, anywhere. High school students who participated in the study used the Critical Civic Inquiry research approach. Hipolito-Delgado also received two grants from the William and Flora Hewlett Foundation through CU Boulder worth \$1 million and a grant in partnership with the National Writing Project worth \$42,500.



MARGINAL SYLLABUS

Remi Kalir, PhD, assistant professor, along with his team Christina Cantrill, Joe Dillon and Jeremy Dean were awarded the John Lovas Award for their Marginal Syllabus project given by the journal "Kairos." The Marginal Syllabus organized 27 ongoing annotation conversations with educators and used open and collaborative web annotation to spark social scholarship in reading and public writing about literacy, equity and education.



Melody Brown, LMFT, assistant clinical professor in the Marriage and Family Therapy/Counseling program, earned her PhD from Syracuse University, where she was awarded the David B. Falk College of Sport and Human Dynamics Doctoral Prize. Prior ucation experience includes serving as to this position, she taught at SEHD as the interim vice president and provost an adjunct faculty, providing clinical group supervision and oversight of internship sites, and she worked in the CU Denver Student and Community Counseling Center for eight years.



Gene Hall, research professor in CU Denver's C-PEER Center, earned his PhD in science education from Syracuse University. His credentials. include president/consultant for Concerns Based Systems, Dean of the University of Las Vegas College of Education (1999-2004), Dean of the University of Northern Colorado College of Education (1988-1999), professor at the University of Florida (1986-1988) and professor at the University of Texas at Austin (1968-1986.) Subjects of his recent publications range from implementing change to an introduction to teaching to the foundations of American education. His scholarship and research have recently taken him to Australia, Hong Kong, Singapore and Taiwan.



Diane Hegeman, clinical assistant professor and program lead in the Leadership for Educational Equity Higher Education EdD program, earned her PhD from Colorado State University. Her most recent higher edfor academic affairs at the Colorado Community College System. She has over 25 years of community college administrative experience and has served in a variety of roles supporting student and academic success. Her research interests include the alignment of community college mission statements as evidenced through print and web resources and the importance of a professional and institutional ethical identity.



Sean Michael Morris, senior instructor in the Learning, Design and Technology program and director of the Digital Pedagogy Lab (DPL), received his MA in English from the University of Colorado Boulder and most recently worked at the University of Mary Washington. His teaching and research interests include critical pedagogy, digital pedagogy, scholarship of teaching and learning, open education and learning design.



NEW FACULTY

Claudia Truiillo, instructor and coordinator of the CU Denver's Trinidad State Junior College undergraduate teacher education partnership, received her MA from Adams State College. She comes to SEHD from Trinidad School District #1, where she has been a language arts teacher, an instructional coach, and an elementary school teacher.



Laura Summers, clinical assistant professor in the Learning, Design and Technology program, received her PhD from University of Northern Colorado. Dr. Summers may look familiar to many alumni. She taught in the Information and Learning Technologies program from 2006 - 2011. Most recently, she worked as the director of professional learning and culturally responsive teaching at Denver Public Schools and as an adjunct faculty member for SEHD's EdD program and as the faculty lead for the teacher librarian program.



ASPIRE to Teach, CU Denver's alternative teacher licensure program, is a highly personalized and low-cost option for individuals living in Colorado who already have a bachelor's degree and have decided to pursue a teaching career. The program has been in existence for more than six years, licensing more than 1,000 teachers across Colorado. The yearlong preparation is provided on-the-job while candidates earn a paycheck as a teacher in a school.

For the 2019 calendar year, CU Denver has enrolled 347 candidates in the program, a 77% increase since fall 2017, according to Suzanne Arnold, PhD, director of ASPIRE to Teach at CU Denver. A significant portion of the enrollment increase can be attributed to the special education program track under the leadership of Jennifer Fox, MA, assistant director of ASPIRE. The program's reach spans 44 school districts and 195 schools across Colorado. Denver Public Schools is currently the school district with the most teachers enrolled in the program, followed by Douglas County Schools, STRIVE Prep charter network, Harrison School District and Jefferson County Schools.

A WAY TO GET GREAT TEACHERS INTO THE CLASSROOM

ASPIRE to Teach uses technology in innovative ways to reach prospective teachers in rural communities. The high-tech, high-touch program matches each candidate with an alternative licensure instructor, or "ALI," who mentors and provides one-on-one support and personalized video coaching, matching program curriculum with candidates' needs to enhance their development and growth. Types of schools impacted include public, private, charter, innovation, rural, facility and early childhood centers.

"Our Colorado communities, schools and students deserve the highest-quality teachers," said Jennifer Kral, educator preparation principal consultant for the Colorado Department of Education. "We appreciate the strong partnership we have with ASPIRE to Teach and their strong focus on finding and training teachers for our rural schools. The program's rolling admissions option is an attribute that especially attracts candidates. According to our

records, this program has the highest number of alternative licensure candidates in the state."

ASPIRE to Teach is attracting diverse high achievers, many of whom are career changers and already have advanced degrees. Students in our program are more likely to be male and older than students in a traditional teacher education program in Colorado. The program saw a 29% increase in veteran and military enrollments in the past year. The oldest student started at age 68.

"All of my experiences from the beginning to the end of the ASPIRE program were great," said Jessica Bell, ASPIRE to Teach alumna. "I had so much to live for after I started teaching. Furthermore, I had even more to live for after I started ASPIRE to Teach. I feel much more equipped for

my career. ASPIRE was the million cherries on top for me. I don't know where my main faculty member, Dane, finds the time, but he has offered tremendous support to our cohort, from the beginning of the program until now. ASPIRE is everything they said it would be ... everything! I couldn't be happier with my choice."

WHAT'S NEW?

ASPIRE to Teach endorses teachers in all qualifying content areas, including high-need fields like math, science and special education. Last spring, ASPIRE leveraged content experts to design specific methodology curriculum for visual arts, physical education, music and drama due to increased demand for those subjects. "These experts are now serving as ALIs, enhancing our program's ability to coach and develop our candidates in those content areas," said Arnold. "Our strong reputation and high customer service are feeding our program growth. I'm proud of the innovation and dedication of our faculty, program managers and students for making this the top alternative licensure program in the state."



Suzanne Arnold, director of ASPIRE to Teach, with Jessica Bell, alumna of ASPIRE to Teach.

ASPIRE to Teach

an altnerative teacher licensure progam

347 teachers in the program

44 school districts

schools across Colorado



UNIVERSITY OF COLORADO **DENVER**

School of Education & Human Development

Campus Box 106

PO Box 173364 Denver, CO 80217-3364



