

A detailed study into the world of early childhood education could help put struggling kids on the path to long-term success.

How Children Learn

BY GINNIE GRAHAM
PHOTOS BY AARON ANDERSON

EACH YEAR, 4-YEAR-OLDS COMING INTO THE PRE-K CLASSROOM of Melissa Sterling vary widely in skill, from knowing the alphabet and asking lots of questions to barely showing interest in learning or making friends. What she wants to know is why.

Sterling, a Tulsa public schoolteacher, is among graduates from the Early Childhood Education degree program at the University of Oklahoma-Tulsa. She is participating in one of the university's research projects to isolate best practices in pre-K instruction.

Ten years ago, neither of these would have been possible.

Within a decade, OU-Tulsa built a research institute in the burgeoning field of early education that has landed the university on a national stage with a growing, influential reach.

In practical terms, Sterling says this work helps educators better meet the needs of students, especially those who come from challenging situations.

"This time in their lives is so important because their little brains are developing," Sterling says. "The research we're doing is going to tell us socially and emotionally how a child deals with trauma. It's going to help us understand how kids develop and, if they have trauma or do not have a sound social background, how education-wise they learn compared to ones not facing those obstacles."

The establishment of Early Childhood Education (ECE) at OU-Tulsa started with two primary goals — to develop an undergraduate degree program and to initiate an applied research group that would work in partnership with local and national organizations to generate information that will improve early childhood education services. Since 2006, the undergraduate program has grown and a Ph.D. option focused on ECE has been added. Additionally, the research group, the Early Childhood Education Institute (ECEI), has ex-



Melissa Sterling, a pre-K teacher at Skelly Primary Elementary School in Tulsa, reads to students Christa Holder and Isaiah Mobley. Sterling is a graduate of OU-Tulsa's Early Childhood Education degree program and participates in the university's research to determine best practices in pre-K teaching.

panded from one project to multiple applied research projects.

When OU approached Diane Horm about leading the institute, she jokingly remembers having no plans to leave the University of Rhode Island. She was in her 19th year of teaching, serving as an associate dean and in the middle of building a garage onto her house.

Yet, Oklahoma had earned a reputation of supporting early education after becoming the second state to offer free, voluntary and universal pre-K in 1998. By adding 4-year-old classrooms to the education funding formula, school districts could receive compensation for providing pre-K.

The same year, Community Action Project of Tulsa assumed leadership of the Tulsa Head Start Program and forged arrangements with schools and nonprofits to beef up its standards and service delivery to surpass federal standards and offer support to families.

Between 1998 and 2006, enrollment in state or federally funded pre-K programs steadily climbed across Oklahoma to reach 90 percent of all 4-year-olds. For more than 12 consecutive years, Oklahoma has ranked number one in the nation for early education access.

In 2001, Georgetown University researchers started a long-term study on the public early learning programs in Tulsa, with cohorts added in 2003 and 2005. Researchers learned that quality programs can significantly decrease achievement gaps among poor and minority students extending into mid-

dle-school years.

During this time, Tulsa-based oilman and banker George Kaiser had been impressed by convincing evidence in brain and social research showing that the first years of life are crucial in healthy development throughout childhood and adolescence. Intervention in intergenerational poverty became a cornerstone of Kaiser's philanthropic mission.

In 2006, the ECEI at OU-Tulsa was founded with a gift from the George Kaiser Family Foundation. The foundation played a key role in creating the first Tulsa Educare Center. The national program provides low-income families with high-quality, early learning programs that support children, through age 5, and their families to reduce the income-linked achievement gap present in education.

Oklahoma became an opportunity Horm could not turn down. She has been the director since the ECEI's founding.

"The first project of the ECEI was a relationship with Educare, to be its local program evaluator in the context of national evaluators," Horm says. "That year, we also formed a relationship with the Community Action Project of Tulsa. Often, we are looking at classroom quality and giving those results back to the organization to inform its work on continuous improvement."

The ECEI is part of the OU Jeannine Rainbolt College of Education in Norman and a component of the Early Childhood Education research and academic programs avail-

able on the OU-Tulsa campus.

The ECEI worked with four other universities that were partnering with their local Educare sites and the Frank Porter Graham Institute at the University of North Carolina at Chapel Hill to conduct a randomized control trial (RCT) of the Educare model. RCT studies are considered the “gold standard” of scientific proof of a program.

The results of the RCT indicated that infants and toddlers from low-income families who participated for one year in the program had better language skills, fewer problem behaviors and more positive interactions with their parents than children who were not in the program.

The ECEI has since added a contract with the Little Dixie Head Start in southeastern Oklahoma for classroom observation data to inform its professional development. The institute recently negotiated a contract with the national evaluation firm Mathematica to assist in the preparation and testing of infant/toddler professional development materials.

“I would put our data collection team up against anybody,” Horm says. “We have well-trained staff who are very good about entering classrooms in a respectful manner and conducting classroom observations; they are also expert in working with children when they administer the child assessments that are also part of our work. I have great confidence in the data we generate.”

“The work that we’ve done – going from more local to state to national – at every step of the ladder, we’ve had an impact in sharing our results back with organizations to help them do their jobs better. So, the people who deliver direct services profit from collaborating with us and marry our results with what they collect to critically look at their craft to see how they are doing.”

In 2016, the ECEI formed a partnership with researchers from Georgetown and Harvard universities to launch one of the most significant studies in the field, called the School Experiences and Early Development, or SEED.

OU-Tulsa researchers began last year recruiting and assessing 640 3-year-olds enrolled in Tulsa’s Educare, Tulsa’s Head



April Dericks, SEED Project Coordinator for ECEI at OU-Tulsa, assesses pre-K student David Cummings in the library of Tulsa’s Skelly Primary Elementary School.

Start and community-based childcare classrooms. This school year, about 700 children entering the Tulsa Public School district’s pre-K program were added. Next year, a group of incoming kindergarten students will join the study, which will look at children coming from different education backgrounds — from being cared for at home by a parent to having participated in programs at child-care homes or centers.

Researchers will follow students through the second grade with optimism that additional grants will extend the analysis into later years. The goal is to identify exactly what factors lead to the positive outcomes seen in previous analysis of early childhood programs and to figure out how to keep it going.

“There is consensus in the literature that pre-K gives children that initial boost to get them ready for kindergarten,” Horm says. “That’s fairly well established. The question now is what sustains the boost over time. There have been people bringing up the question of fade-out, which is found in some studies and not found in others.”

“So, what is it that is working? What are the ingredients in the early primary years that sustain the boost? Because we consider different early childhood experiences, we are trying to look at different mixes of experiences and how that feeds into the equation, too.”

Filling a void of data in this age group is a unique aspect of the SEED study, says Sherri Castle, senior research and policy associate at the ECEI.



ECEI at OU-Tulsa Director Diane Horm (center) receives project updates from Research Associate Leah Smith (left) and Senior Research and Policy Associate Sherri Castle (right). With Horm's help, ECEI has brought OU to the forefront of early childhood education nationwide.

"The prior work really documents the pre-K experience and boost, then research money runs out and research stops. Then, they show back up in third grade," Castle says. "There is a lot of research starting in third grade tied to graduation.

"But, there is this black box between pre-K and third grade as to what is happening. So, every year in the SEED study we are going to be doing direct assessments with the children."

The SEED analysis will also include information from classroom observations, child assessments and surveys from teachers, principals and parents. These elements make the SEED study more comprehensive than previous research.

"We are really trying to get the full context to expose under what conditions and for whom this pre-K boost will be sustained, and also where we may see children falling down a different trajectory," Castle says.

The national discussion about potential fade-out of gains achieved in early childhood programs includes a variety of factors playing into a child's life while growing up, many of which have yet to be studied, Horm says.

"Certainly, every year in a child's life contributes to lifelong development, and we know that starting earlier works to have better outcomes over the course of a lifespan," Horm says. "It just happens that kindergarten is fairly common across our country, so 4-year-old programs meant an early year. But there is really nothing magical about that year.

"We want children to have good experiences every year. Part of what the SEED study will do is look at that black box and how we can think about what makes these programs work so well."

While the ECEI has been growing, so has the academic

degree program. Students complete the first two years at Tulsa Community College then finish at OU-Tulsa. The George Kaiser Family Foundation has a loan forgiveness program for graduates working in Oklahoma early childhood programs.

Since 2006, OU-Tulsa has bestowed more than 100 early childhood bachelor degrees and approximately 10 doctoral degrees in early childhood education.

This fall, the university welcomed its largest undergraduate class from TCC. "We anticipate a big class next year as well," Horm says. "The undergraduate

program looks like it is growing, and we have hit our stride." The bachelor's completion program recently received national attention when it was featured in a report by the New American Foundation.

Students are largely non-traditional, meaning they work during the day and complete classwork at nights and on selected weekends. The curriculum involves the use of emerging research data.

"So many people feel like data is the ultimate four-letter word, especially teachers and educators feel very beaten up by data and how data is leveraged against them," Castle says. "But we want to use data as a flashlight or a tool to really tell their stories and to let their work be known. That combination of data and anecdote is what we believe speaks to educators, legislators and people who make decisions."

In 2011, OU officials opened up competition for the school's University Strategic Organizations (USO), which is a label designated to areas of research and academic study that are priorities for OU as well as the state and nation.

Horm jumped at the chance and successfully landed the USO designation for the ECEI, which brings national attention to the early childhood research work at OU.

The ECEI director can see a future at OU where early childhood research cuts across disciplines and campuses at Norman, Oklahoma City and Tulsa.

"There is a need for education for the general public about the value of early childhood education and that it does make a difference — in both the short- and long-term," Horm says.



Ginnie Graham is a reporter for the Tulsa World.