Now that you are familiar with Dr. Beth VanMeeteren, whose story we featured on Wednesday, let’s take a look at early childhood resources at UNI. The Regents Center for Early developmental Education and CEE STEM are full of opportunities and resources for UNI students and Iowa educators. The Regents’ Center offers high quality professional development to childcare providers, child development center directors, preschool educators and directors, and K-3 teachers and administrators. Topics within professional development include literacy, social development and conflict resolution, chemistry through cooking, physics, STEM, and mathematical development.

Beth VanMeeteren, Director of the Early Childhood Center, discussed a few resources that the Early Childhood Center provides. The first resource is Professional Development, “The professional development has been popular throughout the state of Iowa and Midwest as well as throughout many other states such as California, Utah, Ohio, Massachusetts, Virginia, Washington DC, Alabama, and Alaska as well as China, Japan, Brazil, and Mexico. The Regents’ Center is becoming well renown for its professional development and curriculum for early childhood STEM education.”

The second resource Beth discussed is the CEE STEM Center as a physical space for students and teachers to work and learn in “There are many universities and colleges that list STEM centers on their website, but exist in name only or are represented by a one-occupant office. Very few devote an actual physical space with materials for a STEM center where teachers and preservice teachers can go to work with materials and learn how to be quality STEM educators. The Regents’ Center space offers a conference room for faculty meetings, staff development, or curriculum development. We also have the beginnings of a teacher maker space where educators are encouraged to browse and explore materials, and a professional library to design curricula specific to student needs. We have examples of math games for teachers and UNI teacher education students to peruse and consider for classroom and instructional use.”

The Ramps and Pathways program is a specific program available to inservice and preservice teachers who want to engage their younger students in STEM. “Ramps and Pathways is truly a STEM curriculum. As children Engineer and build their own Technology of ramp systems, they engage in mathematics (spatial thinking, seriation, number, geometry…) and encounter the laws of physics as they try to move an object in a specific way (science). In addition, they observe properties of objects (wood, glass, metal, plastic, round, cylinder, light, heavy etc.) and how those properties affect movement.” This program can help teachers learn how to engage children in engineering rather than teaching children about engineering, “Ramps and Pathways is an extraordinary way to engage children in engineering rather than teaching children about engineering. I’ve rarely had to provide challenges to children as they pose their own problems. I have photos of a child that designed a structure that moved a marble 39 feet in a 3x3 foot square of space! Schools that resist the impulse to focus only on what the state is testing and encourage their pre-kindergarten – second grade teachers to include STEM throughout their day can allow their students a strong start that will last by providing them with a robust, well-rounded, and rich curriculum such as Ramps and Pathways.” Check these programs out for yourself and see how they can assist you throughout your education at UNI.
The success or failure of our future is going to rely on the students and teachers of today. So we have got to support the students and teachers of today because that is going to guarantee our success in the future.” - Pat Higby

Story by Stefani Keller,
UNI STEM Program Associate,
Communications
smkeller@uni.edu

STEM at UNI and STEM Education at UNI supports the Vision & Mission of UNI by engaging UNI students, faculty, & staff in STEM campus programs & outreach for K12 students and educators.

If you are interested in being featured for one of our STEM Stories please contact us. We would love to hear your story.

Contact Us
UNI STEM
229 East Bartlett
319.273.7399
www.uni.edu/stemed