





The Alma Irene Aitch STEM Center Open House

Wednesday, December 6, 2017

Alma Irene Aitch dedicated her life to others, and believed that every person should have the opportunity to demonstrate their intellectual ability, live in a democratic and free society, and have equal access to public education. Born in Union, Missouri, Aitch was a dedicated educator and pioneer, earning her teaching certificate from Lincoln Normal School in Jefferson City, Missouri, and postgraduate degree from Lincoln University.

Her teaching career began in 1923 as a teaching aide in Jefferson City, Missouri. Her journey then carried her to Lincoln Grammar School in Edwardsville, Illinois, from 1924 to 1951. African American teachers were not hired or considered during the schools' desegregation period, thus many world class educators, such as Ms. Aitch, were left unemployed.

Aitch's courage and sacrifice established a lasting legacy for future generations, as she was known for her service to others and a helping hand for those in need. Her volunteerism included membership to organizations such as the Madison County Tuberculosis Sanitarium, Secretary for Church Women United, Girl Scout Brownie, Edwardsville Area League of Women Voters, and the Madison County Historical Society.

On Feb. 14, 2001, Aitch was honored by the Missouri House of Representatives on her 100th birthday, highlighting her incredible education career, the journey she traveled for social justice, her life of respect, generosity, and more importantly, her dedication and commitment to the education profession, for which young people can aspire.

THE STEM MEETS HUMANITIES PROGRAM is designed to foster young leaders who will solve the world's social problems through humanities focused STEM programming. Projects include the Digital Humanities Club, the Math Games League, Urban Gardening, Robotics and Water Education.

The STEM Meets Humanities Program will provide programing for Madison County students

M Meets Humanities" Programs 2017-2018

THE DIGITAL HUMANITIES CLUB is being offered in fall 2017 for middle school students in the Madison and Venice,

Illinois school districts. Digital humanities apply computational tools and methods to traditional humanities disciplines. For example, club participants create content that is meaningful to them for podcasts, websites, documentaries, and digital maps. The Digital Humanities Club aims to give the participants skills to create their own digital platforms to share what they are passionate about in their communities.



THE MATH GAMES LEAGUE uses a

near-peer mentor model to provide opportunities for both high school and 5th grade students in the Madison, Venice, Brooklyn, and Alton, Illinois school districts. There will be two leagues, a returning Alton league and a new Madison league that includes students from Madison, Venice and Brooklyn school districts. High school students will serve as near-peer mentors, getting paid to mentor and teach 5th graders from their community. The high school coaches will be supervised by graduate and



undergraduate college students from SIUE. Students at all levels will learn key math concepts through engaging, hands-on activities that build an understanding of fractions. As the spring semester comes to an end, the winning team from each league will receive a paid trip to Chicago for the national tournament.

URBAN GARDENING will begin in spring 2018, providing programming for elementary-age girls living in Madison County housing. We are working with four Madison County Housing Authority sites: Meachum Crossing, Gateway Apartments, Woodland, and Alton Point Apartments. The curriculum will offer hands-on plant science and gardening experiences that increase girls' confidence in STEM. Projects include building raised bed gardens and making seed packages, which both provide a sustainable approach to growing food in urban communities.



PARTNERS OF THE ALMA IRENE AITCH STEM CENTER:

Southern Illinois University Edwardsville

Lewis and Clark Community College

Madison County Regional Office of Education

Madison County Schools

The Young People's Project

Madison County Housing Authority

For more information on the Alma Irene Aitch STEM Center and its programs, please contact: Candice Johnson, Program Coordinator (618) 650-3502

WATER EDUCATION

The L&C MJCH offers various programs to promote water education. The L&C Swarovski Waterschool USA Mississippi River aims to educate students about the human connection to and reliance on healthy and functional water ecosystems. Water Festival teaches local



children about water issues from conservation and pollution to safety and recreation through hands-on learning experiences on L&C's Godfrey Campus annually. Stream Discovery encourages children in grades 5-12 to learn about water stewardship through the experience of monitoring a local stream.

ROBOTICS education fosters problem solving skills, team work, and computer programming skills. We plan to begin a robotics program in 2018 that will introduce how socially assistive robots (SARs) can be used to improve quality of life. SARs are made to provide emotional, cognitive, and social cues to encourage development,

learning, or therapy for an individual. Examples of current uses of SARs are helping persons with disabilities become more independent, as well as helping children navigate behavior disorders. The SIUE STEM Center will partner with the Madison County Regional Office of Education to train teachers in robotics, provide after-school programming, and introduce students to robotics engineers from the SIUE School of Engineering. We are excited about the numerous possibilities as we add robotics to what our center has to offer.

