<u>Supporting a Community's Informal Education Needs: Confidence and Empowerment in STEM</u>

- · Create a STEM ecosystem in Fuller Park, a chronically, severely under-resourced urban community in Chicago
- · Support Fuller Park Community environmental science literacy
 - » cognitive, affective, behavioral, skill-building, engagement, interest, identity
- · Broaden access to and participation in environmental conservation and science learning opportunities
- · Strengthen partnerships in support of sustainable capacity to support science literacy
- · Research ecosystemic SCIENCES project model

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RAMEWORK

- Informal science learning
- · Conservation psychology
- · Urban science education

through community action, clearing an illegal dump site and establishing a public natural habitat. ABOUT THE FULLER PARK

ABOUT FORN PLACE NATURE CENTER Eden Place Nature Center is an urban oasis in Chicago's south side Fuller Park neighborhood,

encompassing an area of one city block. Eden Place

was founded by a local family in 2003 following the

lead level in Chicago. The nature center was created

discovery that the neighborhood had the highest

Fuller Park is a less than one square mile residential and industrial region bounded by two rail lines and an expressway, 90% of Fuller Park's 2,500 residents are African American, 50% are below poverty,

30% are unemployed, and over 25% of adults do not have a high school diploma. Fuller Park has long been one of Chicago's severely geographically isolated, underresourced neighborhoods. At the same time, there appears to be a disconnect between residents and the very few existing resources. Fuller Park neighborhood resources such as businesses, the school, churches, and

community-based organizations are not necessarily utilized by local residents.

Using case study methodology,

science literacy and agency.

research conducted by University

of Illinois at Chicago and Chicago

Zoological Society explores how a large

organization to support environmental

informal science learning institution works with a community-based



FDUCATION PROGRAM AUDIENCES AND OFFERINGS

SCIENCES, a four year project (2013-2017), includes one planning year, two program implementation years, and one synthesis year. SCIENCES offers programs for pre-K to gray audiences.

Professional audiences

- · Teacher, early childhood educator, and informal science educator professional development
 - » Attendance at 9 programs was approximately 100°

Public audiences

- · Family programs, camp, youth programs, workshops, festivals, and community conservation action events
 - »Attendance at 33 programs was approximately 1,600°

Student audiences

- School group classes, field trips, science fair, and teen volunteer program
 - »Attendance at 19 programs was approximately 600'

Each program year is united by an environmental

- · Pollinators and Native Gardens (First program year)
- Fuller Park Water A shared resource for healthy people, plants, and animals (Second program year)

SCIENCES NATIONAL AMPLIFICATION NETWORK

The SCIENCES project team seeks to network with other institutions and urban centers with related goals. The project team hosted a SCIENCES symposium in 2016. SCIENCES presentations have been made at professional conferences



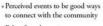
- · Association of Zoos and Aguariums (AZA)
- Chicago Wilderness
- National Association for Research in Science Teaching (NARST)
- Visitor Studies Association (VSA)

CHALLENGES AND OPPORTUNITIES

- · SCIENCES project staffing transitions have occurred
- · SCIENCES project partner staff members are working together in new ways within and across organizations
- Neighborhood resident participation in SCIENCES programs can
- · SCIENCES project staff must identify and connect with shifting neighborhood resources
- · Chicago violence has increased, and public trust has diminished
- . State of Illinois, City of Chicago, and Chicago Public Schools have devastating budget deficits



- · Evaluation conducted by ExposeYourMuseum, LLC includes a team of Community Ambassadors, independent contractors with connections to the Fuller Park community.
- · Formative program evaluation results' indicate the majority of surveyed participants:



- » Felt safe and smart
- Reported increased connection to their environment
- Reported increased comfort with science

imall sample size, not conclusive









ACKNOWLEDGMENTS





