Catalyzing Inclusive STEM Experiences All Year Round

CISTEME365

Program Overview
April 13, 2021

Funding provided by the National Science Foundation under Award# 1850398.
We are striving for a future where every student has equitable access and opportunity to reach their potential in STEM.
Broaden Participation in STEM

• Provide technology and engineering rich informal learning experiences year-round
• Strengthen students’ understanding of STEM opportunities and careers
• Provide equitable and inclusive environments to explore, experiment, make, and create

A STEM club member gives a presentation about her summer research project. (Image courtesy of Neal Garrison.)
Bridging Traditional Silos

University

High School / Middle School

In-school STEM

Out-of-school STEM

Broadening Access & Participation in STEM Majors & Careers

IDEA Teams

STEM Clubs

Summer Camps

CISTEME365 Project
IDEA Teams

- 3-4 team members (at least 1 counselor and 1 teacher)
- Willing to take steps to broaden STEM participation
- Learn together & Work together
Professional Development

- Electrical Engineering Projects
- Equitable & Inclusive Environments

- Approximately 12 full-days
- June 2021-May 2022
- Virtual Summer Institute
- On-Campus Fall Institute (tent.)
- Networked Improvement Community sessions
- Action Research for Equity Project
Leadership Team

Prof. Goddard
Engineering

Dr. Pollock
Equity Instructor

Dr. Williams
CEO/Learning Dev.

Dr. Hebert
Public Engagement

Dr. Rosu
ISTEM Director

Prof. Baber
Education Research

Dr. Ahmad
Industry Liaison

Prof. Boyce
External Evaluator
Prior Work

• nano@Illinois Research Experience for Teachers
  http://nano.illinois.edu/education/RETmodules/index.html

• Worldwide Youth in Science & Engineering (WYSE)
  Girls Learning Electrical Engineering camp
  https://www.istem.illinois.edu/news/games.glee.18.html
STEM Clubs

- Curriculum and materials
- Electrical Engineering focused
  - LED Calculator
  - Analogue & Digital Circuits
  - FM Transmitter
- Flexible STEM Club allowance
- College & Career webinars and resources

Supplies for 40 students at 1 school
Summer Camp Scholarships

- Exploring Engineering Options
- Deep Dive into a Major
- Middle and High School Opportunities
- EAGER: Engineers Aiming for Gender Equity and Representation
- Trail Blazer Scholarships

Applications Open in February
## Commitments

### IDEA Team (3-4 members)
- Attend professional development as a team
- Complete individual Action Research for Equity Project (AREP)
- Establish or enhance a STEM Club
- Encourage students to apply for summer camps
- Assist researchers in obtaining artifacts

**Receive** individual stipends $1,200 and Illinois Professional Development Hours.

### School Leadership
- Provide release time for IDEA Team professional development
- Work with IDEA Teams to establish STEM Club and recruit student participation
- Participate in CISTEME365 action planning and showcase sessions

**Receive** Materials, stipends, and scholarships amount to ~$50,000 per school.

---

**Close Ties with the Grainger College of Engineering**

**A Growing Network of Schools with Similar Goals of Broadening Participation in STEM**
Here's what you need to do to apply:

1. **TEAM**
   Identify a 3-4 person team, which must include at least one counselor/academic advisor and one teacher.

2. **ESSAY**
   Prepare ~500 word essay to tell us why you are interested in the program and why it is a good fit for your school.

3. **COMMITMENT**
   Gather commitments from each team member and the campus principal. *(Must include commitments to cover substitutes)*
Join the CISTEME365 Network

Apply before May 1

CISTEME365 Contact Information:
Beth Kirchgesner
kirchges@illinois.edu
217-300-0041

Funding provided by the National Science Foundation under Award# 1850398.