Welcome to the National Girls Collaborative Project National Webinar

Impact Discussion: The Challenges and Strategies of Reaching Hard to Reach Girls with STEM Education

April 16, 2019

Agenda

- AISES Overview
- Phase 1 Discussion: The Challenges
- Phase 2 Discussion: The Strategies
- Phase 3 Discussion: Steps Toward Action
- Summary and Closing

American Indian Science and Engineering Society

Kathy DeerInWater
Director of Programs and Research,

National Girls Collaborative Project

The mission of AISES is to substantially increase the representation of American Indians, Alaska Natives, Native Hawaiians, Pacific Islanders, First Nations, and other indigenous peoples of North America in science, technology, engineering and math (STEM) studies and careers.

Pre-College

College

Professional

AISES is a national, nonprofit organization founded in 1977 by a small group of American Indian scientists and engineers.

- Only organization specifically supporting Native students and professionals in science, technology, engineering, and mathematics (STEM) fields.

- 4,600 Individual Members

- 20 Professional Chapters

- 2 Tribal Chapters

- 190 College/University Chapters

- 158 K-12 Affiliated Schools

- $11.7 Million in Academic Scholarships

AISES' Four Strategies for

Increasing STEM Success in Indian Country

#1: Build Awareness and Increase Retention in K-12 STEM

Start the pathway by providing Native K-12 students, parents, and educators exposure to STEM activities and programs, build awareness around STEM degree and career options, and provide opportunities to engage them in STEM.

- Computer Science and Robotics, Science and Engineering Fair, Energy Challenge, Financial Education, Leadership Development, College Fair, High School Affiliate Chapters, Research Support and Competition

#2: Increase Access to and Success in STEM Higher Education

- Continue the pathway through higher education by providing financial and academic support and opportunities to Native college students to increase the numbers of successful Native STEM majors and degree recipients.

  - Scholarships, Internships, College Chapters, College and Career Fair, Research Support and Competition, and Community

#3: Provide Leadership and Promote Change to Improve Professional Opportunities in STEM

Supporting the pathway to keep Natives in STEM careers through support of professional Native STEM network and career development resources.

▶ Mentoring, Research Support and Presentations, Professional Chapters, Career Opportunities, Business Development Support, Leadership/Management Skill Development

#4: Identify and Leverage Strategic Partnerships and Conduct Research in STEM Issues Specific to Native Americans

Illuminate the path by identifying the challenges and successes in Native STEM Workforce Development through research, data collection, and partnerships with other key STEM stakeholders.

▶ National Science Foundation (NSF) Supported Projects, Collations and Collaborations with other STEM Organizations, Private Foundation Partnerships, General Grant Projects and Initiatives

Discussion Process

Phase 1 Discussion: The Challenges

○ **Question 1**: We know that increasing access does not necessarily increase equity (i.e. simply having more programs does not necessarily mean more girls will participate.) Knowing that your intention is always to attract and engage more girls, which girls do you feel are unknowingly excluded or unable to participate in your programs?

○ **Question 2**: What are the barriers to participating that you see come up the most when targeting girls?

○ **Question 3**: What are specific challenges you have faced in trying to contact and get girls facing layered barriers to STEM education through the door?

○ **Question 4**: Once you offer programming to girls facing multiple barriers to education, what challenges have you encountered retaining or engaging them?

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Phase 2 Discussion: The Strategies

o **Question 1**: What are specific strategies your program has used to recruit girls?

o **Question 2**: What are specific strategies your program has used to recruit girls with multiple barriers to STEM education?

o **Question 3**: What strategies have fallen flat trying to specifically reach girls with multiple barriers to STEM education?

o **Question 4**: Have you used a culturally-responsive approach to your STEM programming, and has that had an impact on the participation of girls? Girls with multiple barriers? Please share in detail.

Phase 3 Discussion: Steps Toward Action

- o **Question 1**: Which other service or cultural organizations in your community can help you reach girls facing multiple barrier to STEM? How might you collaborate with them?

- o **Question 2**: Are there organizations that you think are reaching hard to reach girls particularly well? What is their approach?

- o **Question 3**: How are you evaluating whether you are reaching girls facing layered barriers to STEM education?

- o **Question 4**: How can we evaluate programs to understand the impact not only for girls as compared to boys, but also girls across a diverse background of experience and support?

NGCP National Webinars

[Microsoft Philanthropies and Inclusive Computer Science Education](#)

April 23 at 11:00AM Pacific/2:00PM Eastern

Thank you!