Welcome to the National Girls Collaborative Project National Mentoring Month Webinar

Strategies for Mentoring Girls in STEM

January 24, 2019
Agenda

• NGCP Vision and Goals
• AIA: Equity, Access, and Mentoring
• Girls Advisory Board: Mentoring Impacts
• FabFems Overview
• Questions
• Closing
NGCP Vision

The National Girls Collaborative Project (NGCP) brings together organizations that are committed to informing and encouraging girls to pursue careers in science, technology, engineering, and mathematics (STEM).
NGCP Goals

1. **Maximize access** to shared resources within organizations interested in engaging girls in STEM.

2. **Strengthen the capacity** of programs by sharing exemplary practice research and program models.

3. **Use the leverage of a network** to achieve gender equity in STEM.
National Network of Collaborative Teams

- States with a Local Collaborative
- Collaborative Coming Soon
American Institute of Architects

Rosa Sheng
Principal, Architect, SmithGroup
AIA San Francisco President 2018
Rosa Sheng, FAIA
Principal, Architect
SmithGroup
San Francisco, Ca

“Fail Fast, Fail Often, Let failure be your FUEL, Not Your FEAR. You can Fail in the Moment and NOT be a Failure in Life”
OUR VALUES AND CULTURE

PASSION  EQUITY  SUSTAINABILITY  COMMUNITY  CURIOSITY  INTEGRITY

SMITHGROUP AWARDS FIRST ANNUAL EQUITY, DIVERSITY AND INCLUSION SCHOLARSHIPS
Why Equity Matters

MEME CREDIT - CRAIG FROEHLE
Why Equity Matters
Why Equity Matters for Everyone
Why Equity Matters for Prosperity

With historically minority groups set to constitute the majority of the U.S. population by 2044, “their social and economic well-being will determine the country's success and prosperity,”

The Equity Atlas

A map of nationalities on Chicago’s Near West Side from the Hull-House Maps and Papers. (Public Domain)
WHY EQUITY MATTERS:
A NEW VALUE PROPOSITION FOR STUDENT SUCCESS

California Community Colleges
Student Food and Housing Insecurity
Statistics

IT'S EXPENSIVE TO LIVE IN CALIFORNIA...

43% of the total cost of a community college
education is spent on housing and 30% of
students are solely responsible for
their housing costs.

25% of California community
college students experienced
homelessness.

AND THE STEREOTYPE OF THE "STARVING STUDENT" IS A
REALITY FOR HUNDREDS OF THOUSANDS OF CCC STUDENTS

"Food insecure students, in
particular, were more likely to
indicate intention to drop out,
and were much less likely to
feel confident in their academic
abilities."

*From "College Ready, Hungry, and Homeless," CA Assembly Speaker's Office of Research and Floor Analysis

8 factors contributing to an overall LGBTQ-friendly college environment

Recruitment and Retention Efforts
Policy Inclusion
Support & Institutional Commitment
Campus Safety
Student Life
Academic Life
Counseling & Health

Statistics of Campus Sexual Assault

1 in 5 women will be sexually assaulted during their college career
95% of assaults go unreported

1 in 13 men will be sexually assaulted during their college career

8 in 10 survivors knew the attacker

Every 21 hours someone is raped on an American college campus

SMITHGROUP
WHY EQUITY MATTERS:
A NEW VALUE PROPOSITION FOR STUDENT SUCCESS

let's change the conversation
about mental health

mental health issues are prevalent among young adults
Sometimes referred to as the “anxious generation,” today’s young people are actually much more likely to talk about mental health than their parents or grandparents. This generation is closer than ever to breaking the stigma around mental illness in a time when only 46 percent of adults—and less than 20 percent of children and adolescents—with diagnosable mental health problems receive the treatment they need.

Undocumented Students in California: What You Should Know

<table>
<thead>
<tr>
<th>DEMOGRAPHICS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>750,000</strong> California’s undocumented residents live across the state</td>
</tr>
<tr>
<td><strong>240,000</strong> 11-year-olds born in the U.S. are eligible for DACA</td>
</tr>
<tr>
<td><strong>250,000</strong> 18-year-olds are eligible for DACA</td>
</tr>
</tbody>
</table>

**39%** of students in college experience a significant mental health issue

**50%** of cases of mental illness among those 18-24 go untreated

**2/3** of students with anxiety or depression don’t seek treatment

mental illness is treatable and suicide is preventable

Even so, many suffer in silence. Active Minds is changing that.
"We all grapple with the paradox that tomorrow is not promised, but we make plans anyway"

-Lin Manuel Miranda
Architecture, Equity, and Feminism’s Third Wave

DESPINA STRATIGAKOS, KELLY-HAYES McALONIE

JUSTINE CLARKE AND LORI BROWN

CAROLINE JAMES, DENISE SCOTT BROWN, ARIELLE ASOULINE - LICHTEN
Who is at the Table? - Architects

Sources: National Architectural Accrediting Board, National Council of Architectural Registration, AIA National, and US Bureau of Labor and Statistics
How to Eat a Whale?
Biting off more than one could chew, (or Not)

MELINDA MAE, BY SHEL SILVERSTEIN,
WHERE THE SIDEWALK ENDS
How to Eat a Whale?
Small bites, more people, and bigger forks!

MELINDA MAE, BY SHEL SILVERSTEIN, WHERE THE SIDEWALK ENDS
LIFE OF AN ARCHITECT: CAREER PINCH POINTS

- Graduation
- Early Career
- Mid Career
- Late Career
- Retirement

- Hiring
- Paying Dues
- Licensure
- Working Parents
- Glass Ceiling
LIFE OF AN ARCHITECT

PINCH POINTS

GRADUATION

EARLY CAREER

MID CAREER

LATE CAREER

RETIREMENT

CAREER DYNAMICS

STUDIO 0-5 YEARS

PAYING DUES 0-5 YEARS

LICENSURE 3-9 YEARS

CAREGIVING 5-26 YEARS

GLASS CEILING 15+ YEARS

FINDING THE RIGHT FIT

WORK-LIFE INTEGRATION

PROFESSIONAL BEYOND ARCHITECTURE

DEVELOPMENT PAY EQUITY
PAY EQUITY: AVERAGE SALARY BY PROJECT ROLE

- Principal in Charge
- Design Principal
- Project Manager
- Project Architect
- Production Staff
- Technical Lead
- Sustainable Lead
- Interior Designer

- MALE
- FEMALE

Equity by Design:
Metrics, Meaning & Matrices
The Creativity Bias
Equity by Design: Metrics, Meaning & Matrices
Girls Advisory Board

Helen P.
High School Senior
Kentucky
About Me

High School Senior
  ◦ Princeton University

STEM
  ◦ Competition math & coding
  ◦ Developer at Tech Startup
  ◦ Organic Chemistry Research

Outside of STEM
  ◦ Piano/Cello/Guitar/Choir
  ◦ Videography
My Experience As a Mentee

STEM Mentors are Male-Dominated

- Dad
- Professor: Research Mentor
My Experience As a Mentee

FabFems

KGSC Teen Board
- Rosemary Fama
- Czarena Crofcheck

NGCP Girls Advisory Board
- Erin Hogeboom
My Experience As a Mentor

Dunbar Girls in STEM

- Founder & President
- STEMFems Outreach Program
  - Free
  - Coding Classes, STEM workshops, Science Fair Clinics, etc.
My Experience As a Mentor

KGSC Teen Board

- Chair
- Lexington STEM You Can! Camp Director
Importance of Mentoring

Resources & Connections

Role Model Figure

Assurance & Encouragement
About FabFems

Role Model Directory:

FabFems is an international, online, searchable directory of women STEM professionals interested in outreach to girls.

Audience:

- Role Models
- Girl-Serving Programs
- Parents and Girls
Questions?
Discussion

What impacts and strategies do you use to engage girls in STEM?

Questions? Thoughts?
Thank you for joining us today!