



TECAID

Transforming Engineering Culture
To Advance Inclusion And Diversity



WEPAN



Department Faculty Orchestrating Inclusion: Interim Report from TECAID

ADVANCE GSE PI Meeting

May 23, 2016

Session Plan

Agenda

2:00 - 2:20 pm Introduction to TECAID

2:20 - 2:50 pm Panel Discussion

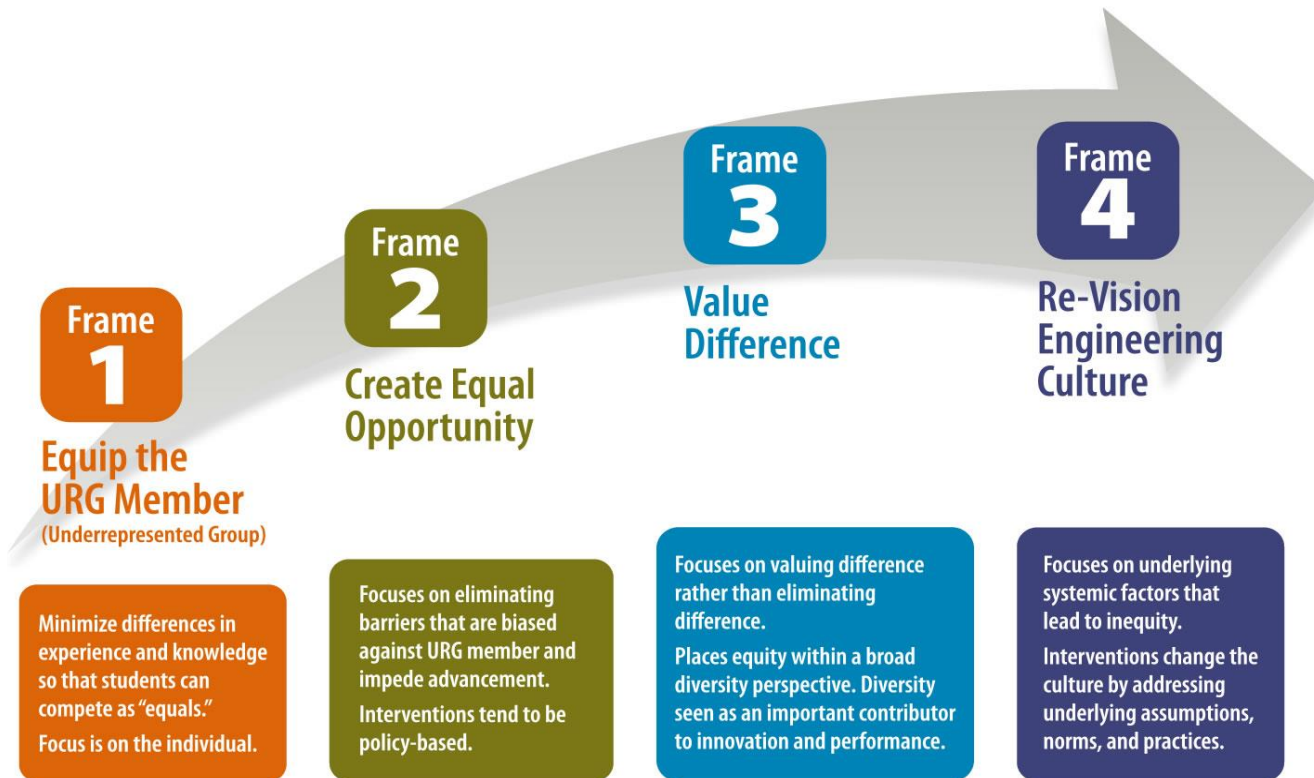
2:45 - 3:30 pm Audience and Panel Discussion

TECAID Project Leadership Team



Simmons Center for Gender in Organizations

Four Frame Model Provided Focus



Source: CGO Insights, Briefing Note No. 1, Simmons Graduate School of Management

TECAID's Three Pivotal Premises

1. We know a great deal about engineering cultures
2. Engineering culture change is needed and can be accomplished
3. Engineering faculty members must assume responsibility for changing department culture



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TECAID Who, Why, What, How?

- **Who:** 5 ME department teams of chair, faculty, staff
- **Why:** To equip and encourage faculty teams to create and sustain inclusive department cultures
- **What:** Intensive professional development curriculum based on research literature: inclusion, diversity, team building, team-based change leadership, and change strategies/processes in academia
- **How:** Multifaceted approach over time: four two-day workshops, monthly virtual learning community, interactions and clinicing with subject matter experts (SME), department projects, evaluation



Who? Purdue, University of Oklahoma, Michigan Tech, Texas Tech, Oregon State University



Why? Equip and Encourage Faculty As Department Change Agents to:

- Create and sustain inclusive interactions, cultures
- Benefit all participants in:
 - Classrooms and labs
 - Student design groups
 - Faculty meetings and hallway interactions
 - Underlying department dynamics



What? Expected Outcomes

- More informed, responsible academic citizenry
 - Regarding gender, race, sexual orientation and other social identities
 - More diversity, more inclusion, better understanding and interruption of bias
- Institutional change
 - Climate/culture
 - Better department leadership, policies, practices
 - Increased collaboration



How? TECAID Designed to Build and Sustain D & I Awareness, Knowledge, Capacity, Vision for Change

Roles

- Individual faculty
- Members of a faculty team
- Leaders in the department

Content Areas

- Diversity topics
- Team building
- Change leadership tools and strategies

Learning Levels

- Awareness building
- Knowledge acquisition
- Skill development
- Competence
- Confidence
- Application to projects



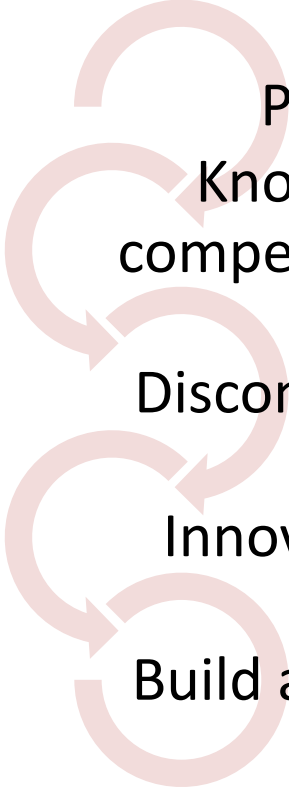
How? Meaningful Learning Experiences through Multimodal Pedagogies

- Presentations
- Written feedback exchanges
- Virtual learning community meetings
- Department projects
- Surveys
- Group exercises
- Cross-department exercises
- Clinicing consultations
- Facilitated group activities
- Facilitated team mini-projects
- Team exercises with movement



How? Build Faculty Leadership Capacity to Advance Inclusion

Capacity Building Approach



Participant readiness
Knowledge, awareness,
competence in leadership,
and inclusion

Discomfort propels action

Innovation and flexibility

Build and sustain inclusion

Actions and Inputs

- **4 2-Day Workshops**
- **11 VLC Calls** to date to collaborate and cross-pollinate ideas among SMEs and TECAID teams
- **2 Clinicing Sessions/Team** to support project development
- **Data Feedback Analysis** to stimulate reflection, identify actions, & maintain momentum

Workshop Objectives

Workshop 1

- **Awareness building** related to diversity and inclusion; Building a skill set for **change processes; Developing teams.**

Workshop 2

- Hands-on Prioritizing of **Change Goals; Change Planning.**

Workshop 3

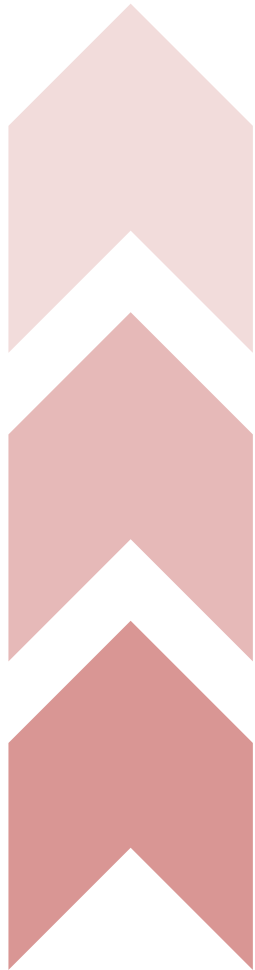
- Deep dive on skills and strategies for **testing and implementing change.**

Workshop 4

- **Accomplishments, synthesis, and ongoing change leadership** to sustain inclusive department cultures

Early Results: Gains in Awareness, Confidence, Actions

March to October 2015



- **Awareness: 50% increased to 75%**
 - Unconscious bias has negative impact on women and minorities
- **Confidence to create change 58% increased to 92%;**
 - Marshal resources 31% increased to 67%;
 - Build alliances with others 69% increased to 96%
- **Actions informed by knowledge of microinequities and inclusive pedagogy:**
 - 26% increased to 67%

Faculty are Emerging as Subject Matter Experts

Increasing intelligence on change leadership from the longitudinal survey:

- Promoting support for diversity and inclusion
 - Formal endorsements, informal interactions
- Developing the capacity to see, know, understand, act
 - Trainings, seminars
- Participating in planning and development
 - Strategic plans, infrastructure development, policy changes
- Community building
 - Partnerships, coalitions, discussion, connection
- Intervening in exclusionary practices

Panel Discussion



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ASME
SETTING THE STANDARD

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Thank you!



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