

## Insights from Engineering Department Culture Change Leaders (Part 2): Dealing with Resistance

On Demand




Support for this work was provided by the National Science Foundation under grant # 1445076. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the view of the National Science Foundation.

## Facilitators



Gretal Leibnitz, Ph.D. (TECAID PI)  
 Research & Grants Consultant  
 Women in Engineering ProActive Network (WEPAN)



Diana Kardia, Ph.D.  
 (TECAID Organizational Change Consultant)  
 Founder and Partner, Kardia Group, LLC





## Department Culture

**Easy to observe, measure**  
 Numbers, systems, processes,  
 physical space


**Hard to observe, measure, affect**  
 Values, Hidden Assumptions,  
 Norms, Unwritten Rules

Image by P. K. Murthy Y


## Engineering Change Leaders




Aisha Kenya Lawrey, B.E., M.P.A. (TECAID Co-PI)  
 Director, Engineering Education  
 American Society of Mechanical Engineers (ASME)




Nancy Barr, Ph.D.  
 Director, Engineering Communications Program  
 Michigan Tech




Brady Gibbons, Ph.D.  
 Associate Professor, Materials Science  
 Oregon State University




## Engineering Change Leaders



George Chiu, Ph.D.  
 Professor, Mechanical Engineering  
 Purdue University




Zahed Siddique, Ph.D.  
 Professor & Chair, Mechanical Engineering  
 The University of Oklahoma



## Webinar Overview

- Forms of resistance (3:29)
- Unproductive responses to resistance (5:50)
- Ways in which resistance is useful (6:30)
- Common sources of resistance (7:02)
- Productive responses to resistance (7:44)
  - Understanding Equality, Equity & Justice (20:00)
- TECAID Resources (27:00)



## Forms of Resistance: What Might it Look Like?

- Silence; passive withdrawal
- Delegitimizing the change effort
- Endless argument; wrangling over small details
- Distractions (irrelevant history, issues, arguments)
- Insincere agreement
- Direct counter efforts; covert whispering campaigns
- Attack on change team and/or other leadership (process, motives)
- “We’ve already tried that” or “That would never work here” or “We have no resources for that”



## Unproductive Responses to Resistance

- Getting defensive
- Giving up
- Attacking back
- Avoiding people who resist or opportunities for resistance to happen
- Not listening to or learning from resistance
- Ignoring the impact on the change team



## A New Frame on Resistance: Resistance Can...

- Provide information about people and circumstances
- Clarify the scope of the unresolved need
- Test and develop the ideas of the change team
- Provide feedback about the effectiveness of current communication efforts
- Generate new ideas or solutions



## Common Sources of Resistance

- 1. People or groups protecting something valuable**  
(resources, reputation, power/influence, personal identity or circumstances)
- 2. People not ready to engage in the proposed solution**  
(lack of information about the problem or the solution; under-skilled; fear and uncertainty about change)
- 3. Not enough resources to commit to the proposed solution**  
(time, energy, money, attention)
- 4. Limitations imposed by cultural or organizational policies and norms**  
(what’s accepted, expected, valued, rewarded, and what’s not; ideas about what’s important or who should be doing what)



### Equality



The assumption is that everyone benefits from the same supports. This is equal treatment.

### Equity



Everyone gets the supports they need (this is the concept of “affirmative action”), thus producing equity.

### Justice



All 3 can see the game without supports or accommodations because the cause(s) of the inequity was addressed. The systemic barrier has been removed.

Image Source Google: Pinterest-Laura Thomas on Equality, Equity, & Justice



## Productive Responses to Resistance (EPIP)

### Educate (the power of information)

- Explain the project (benefits, process, resources)
- Assess where information or data is lacking, and provide it

### Persuade (the power of relationship)

- Provide your personal motivation for the project
- Give voice to the impact of your project on a particular sub-group (e.g., students, assist professors, the chair)

### Incentives (the power of resources & rewards)

- Promise new or additional resources or opportunities
- Appeal to common core values

### Pressure (the power of power)

- Wait it out (time pressure)
- Bring in a higher authority



**TECAID Resources: Website**

TECAID Resources

TECAID project leaders are now working on numerous "outcomes-related" or share with the greater Mechanical Engineering community. The cover-sharing information that provides diversity, equity, and inclusion-faculty and staff members to employ in their department-promote individual, departmental, and broader change-Products will be posted as they are completed

**The TECAID Model**

The TECAID model for engineering faculty change is a practical and evidence-based approach for leading an effort related to DEI. It describes key components of an iterative process that TECAID participants experienced. It can be used by other engineering departments to help conceive of and understand how a DEI focused change process might work. The model shows the interconnection of processes that support the building of awareness, knowledge, and skills necessary for DEI transformation.

**Leading Department Culture Change WEBINAR SERIES**

Transforming Engineering Culture to Advance Inclusion and Diversity (TECAID): An Evidence-Based Approach & Model

On Demand TECAID Webinar 1 >

Insights from Engineering Department Culture Change Leaders (Part 1): Applications of the TECAID Model

On Demand TECAID Webinar 2 >

Insights from Engineering Department Culture Change Leaders (Part 2): Dealing with Resistance

On Demand TECAID Webinar 3 >

[www.wepan.org/mpage/TECAID\\_Resources](http://www.wepan.org/mpage/TECAID_Resources)

**Resources: TECAID Model & Graphic**

TECAID Model: Leading Engineering Department Culture Change in Diversity, Equity, and Inclusion

Leading Engineering Department Culture Change in Diversity, Equity, & Inclusion (DEI)

Learn About DEI, Encourage Department Culture Change

Identify DEI Concerns & Vision

Plan to Implement DEI Change

Build DEI Change Teams

Secure Department Leadership Support

Engage Expert Assistance

Use Conflict Constructively

**Resources: Toolkit & Worksheet**

TECAID Toolkit: Leading Engineering Department Culture Change in Diversity, Equity, and Inclusion

TECAID

WEPAN ASME

PURDUE

**Resources: Case Studies**

TECAID Case Studies: Preparing Engineering Faculty to Lead Department Change in Diversity, Equity, and Inclusion

TECAID

WEPAN ASME

PURDUE

1. Working as a Team on DEI Issues
2. Gathering Strategic Information for Planning DEI Change
3. Effectively Navigating Conflict

**Resources: Webinar Series**

Leading Department Culture Change WEBINAR SERIES

[www.wepan.org/mpage/TECAID\\_Resources](http://www.wepan.org/mpage/TECAID_Resources)

Please provide us your feedback on this webinar:  
[https://www.surveymonkey.com/r/TECAIDWebinar\\_3](https://www.surveymonkey.com/r/TECAIDWebinar_3)

Thank you!