Transforming Engineering Culture to Advance Inclusion and Diversity (TECAID): Overview, Outcomes, & Application!

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TECAID
Transforming Engineering Culture To Advance Inclusion And Diversity
“Head, Heart, Hands” TECAID Outcomes Re-Cap

↑ Knowledge and Use of Diversity, Equity and Inclusion (DEI) Concepts

↑ Confidence in Leadership Skills

↑ DEI Action
Example: Increased Knowledge of Diversity Concepts

“Micro-Inequities” Awareness

BEFORE 59%  

AFTER 96%
Example: Increased Knowledge of Diversity Concepts

“Micro-Inequities” Awareness Informs Interactions

**BEFORE**
36%

**AFTER**
69%
Example: Increased Confidence

**AFTER >90%**

- How to engage in productive change processes
- Leadership skills
- How to create organizational change
Example: DEI Action Taken

Within Last 6 Months

100%

• DEI action taken (Participants taking no action dropped from 37% to 0%)
What do TECAID Results Mean for YOUR Work?

• Teams & Time
• Education & Engagement
• Community & Commitment
• Assessment & Awareness
• Individual & Inimitable
• Desire & Development
Toolkit

Diversity, Equity, & Inclusion (DEI) Department Culture Change

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

- Diverse, Equitable, & Inclusive Engineering Department Culture
- Identify DEI Concerns & Vision
- Plan & Implement DEI Change
- Build a DEI Change Team
- Secure Department Leadership Support
- Use Conflict Constructively
- Engage Expert Assistance
- Cultivate & Sustain a Growth Mindset

Resources: Toolkit & Worksheet

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

Resources:
TECAID Model & Graphic
Resources:
Case Studies

- Working as a team on DEI Issues
- Gathering strategic information for planning DEI change
- Effectively navigating conflict while engaging in DEI change efforts
Leading Engineering Department Culture Change in Diversity, Equity, & Inclusion (DEI)

Diverse, Equitable, & Inclusive Engineering Department Culture
Think-Pair-Share: What’s Your Motivation?

• Why does having a diverse, equitable, and inclusive engineering department culture matter to you?
Leading Engineering Department Culture Change in Diversity, Equity, & Inclusion (DEI)

Diverse, Equitable, & Inclusive Engineering Department Culture

Secure Department Leadership Support  Use Conflict Constructively
Engage Expert Assistance  Cultivate & Sustain a Growth Mindset

TECAID
Discussion: Ground Work

• Where are you already gaining ground in your desire to create DEI-related change? (can choose multiple)
  – Department leadership support
  – Collegial support
  – Expert assistance available (local & external)
  – Experience in using conflict constructively
  – Awareness of conditions (persistence, politic, time, accountability for change…) for sustaining long term effort
  – Other? (Put into chat box)
Case Study 3

Navigating Conflict while Engaging in DEI Change Efforts

Diversity exists through the experience of difference – and difference brings conflict. Conflict per se simply describes the experience of our differences in relation to each other; it is not automatically negative. However, conflict is typically considered problematic based on life experiences in which our differences were not resolved or addressed in a productive manner – thus resulting in loss or in the escalation of tension.

This case study demonstrates the Thomas Kilmann Conflict Mode Instrument. This tool describes five ways people deal with conflict:

- Avoidance: Making no attempt to resolve the conflict
- Accommodation: Allowing the other party to have their way
- Competition: Pushing for one’s way with no interest in the other party getting what they want
- Compromise: Both sides sacrificing some of what they want to get some of what they want
- Collaboration: Both parties working together to find a solution which will meet everyone’s needs

Each of these modes works very well in some circumstances and not so well in others. Misapplication of these modes, overreliance on any one mode, or the use of different styles by different parties can lead to problems such as stagnation, open hostility, and failure to resolve or gain from the differences in our needs, experiences, and identities.

Throughout this case study we have entered (in caps) times and places where these modes of conflict behavior are operative. In addition, we have entered a “+” or a “-” after each behavior indicator in order to express our view of whether the behavior in question was an effective or ineffective use of the conflict mode – and, correspondingly, whether it would play a positive (+) or negative (-) role in the overall team and departmental effort to create a more positive departmental climate.

Through this case study, which demonstrates faculty working through many types of conflict situations, you will see:

- Examples of the use of all 5 modes from Thomas Kilmann Conflict Mode Instrument.
- Distinctions between productive and unproductive conflict behaviors.
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Build a DEI Change Team

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TECAID
Case Study 1

Working as a Team on DEI Issues: The Challenges and Benefits

Most change efforts involve multiple individuals working together in a coordinated manner. However, in academia, most faculty work independently in the majority of their endeavors - with faculty meetings and committee work as their only reference points for collaborative efforts outside of their specific research programs. Thus, a major challenge faced by faculty engaging in change efforts is the process of effectively building and utilizing a change team.

This case study demonstrates how a team-building experience, like the one promoted through TECAID, helps a diverse collection of individuals become a cohesive unit.

In Case Study 1, you will see how several faculty members:

- Came together to work on a departmental problem.
- Progressed from a collection of individuals to an effective working team.
- Made positive use of different members’ points of view.
- Over time, continued to address interpersonal issues and academic norms in order to maintain and continue developing good teamwork.

The Case Study

Like the other teams, Team PQU came into the TECAID process excited about the possibilities for creating a more diverse and inclusive climate in their department. A primary concern was their department’s difficulty in hiring and maintaining a critical mass of female faculty members.

The team itself featured some rank and gender diversity:

- Steve, the newly appointed male department chair and full professor
- Lee, a male full professor
- Rory, a male associate professor
- Alleen, a female assistant professor

The team also represented a variety of DEI-related views and concerns. A question that concerned them was: How could the team work through its own differences to be an effective agent of change?

During one of the TECAID workshops, participants were asked to reflect upon and share their social identities (such as race, gender, ability, and sexual orientation) and their experiences and feelings regarding discrimination and privilege. For many participants, talking so explicitly with strangers about their personal backgrounds and experiences felt awkward and edgy – and talking with people from their own departments, really uncomfortable. These kinds of issues are seldom talked about...
Think & Pair Exercise: Key Action Build a DEI Change Team

• Who do you consider as potential allies? (Pick all that apply)
  • Department head/dean
  • Tenure-line/tenured faculty
  • Clinical faculty
  • DEI and organizational change experts/leaders
  • People-with-identities-different-than-your-own
  • Others? (Put in Chat box)
Leading Engineering Department Culture Change in Diversity, Equity, & Inclusion (DEI)

Identify DEI Concerns & Vision

Build a DEI Change Team

Secure Department Leadership Support
Engage Expert Assistance
Use Conflict Constructively
Cultivate & Sustain a Growth Mindset
Think-Pair-Share: Key Action Identify DEI Concerns & Vision

• Describe your ideal diverse, equitable, and inclusive department… (what does it look like if it is fixed?)
Leading Engineering Department Culture Change in Diversity, Equity, & Inclusion (DEI)

Diverse, Equitable, & Inclusive Engineering Department Culture

Learn About DEI-Focused Department Culture Change

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TECAID
Gathering Strategic Information for Planning DEI Change

Many change efforts experience a sense of urgency, having coalesced in response to an acute sense of a need for change. However, effective action is predicated on excellent planning and preparation. Do we understand what motivated us to come together? Do we accurately perceive the underlying issues, and can we distinguish symptoms from problems? How well do we understand ways our specific local context both enables and hinders this kind of change? The first challenge facing change efforts is the due diligence of strategic intelligence gathering.

This case study demonstrates a productive approach to strategic intelligence gathering – specifically in a case related to diversity, equity, and inclusion (DEI) change. This includes:

- thoughtful and effective data collection in response to an acute problem,
- resolving and making productive use of differences in how individuals perceive the problem,
- analyzing the conditions for making change.

Note: In this case study, the term Underrepresented Minority (URM) can encompass those with identities that are not dominantly represented in your Mechanical Engineering department. This term can include, but is not limited to: women; people of color; English Language Learners; newcomers or immigrants to the United States; LGBTQ people; and people with disabilities. URMs could include those with multiple (or intersecting), non-dominant identities like a woman of color – or those who have dominant and non-dominant identities, like a white, trans-gendered man.

The Case Study

Recently, several undergraduate URM students approached their faculty advisors with concerns about their experiences in the department. In some classes, they had been excluded from student lab teams. They’d also experienced taunts from some white and male peers about their competence. One faculty member gathered these students’ concerns and brought this issue to the Chair.

This was not good news for the department. These faculty foresaw the possibility that such concerns could lead to competent students underperforming and perhaps even leaving their department – thereby making it even more difficult to recruit a diverse student body in the future. They were also concerned about the lack of professional conduct on the part of white and male students as well as the possible inattention or unresponsiveness of faculty.

The Chair decided to create a Task Force focused on two issues: Diversifying the social (racial and gender) climate of their department and introducing instruction or discussion about diversity into a portion...
Think & Write: Key Action-- Learn About DEI-Focused Department Culture Change

Think & Write: What DEI resources are available to you on your campus?

– diversity workshops and seminars
– facilitated diversity-related discussions
– diversity-themed coursework
– diversity-focused offices or administrators
– diversity-focused professional societies
– diversity-focused student groups/student services
– diversity-focused faculty groups
– diversity-focused staff groups
– faculty/staff hiring policies
– other diversity-related policies
## Force Field Analysis Worksheet for Planning Change

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<thead>
<tr>
<th>Forces Pushing for Change</th>
<th>Forces Pushing Against Change</th>
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<tbody>
<tr>
<td>Resources (+)</td>
<td>Barriers (-)</td>
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<tr>
<td><strong>Individual</strong></td>
<td></td>
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<tr>
<td><strong>Team</strong></td>
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<td><strong>Department</strong></td>
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<tr>
<td><strong>Larger Environment</strong></td>
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CHAT: Key Action Plan & Implement DEI Change

• What forces exist currently exist in your department that make DEI change possible?

• What forces currently exist that you will need to overcome in your department to make change possible?
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Key “Take-Away(s)” for Change Agents

• It’s not enough to have knowledge and a plan – even a good one! Successful change depends on laying the groundwork and involving people in the process.

• Change is a dynamic, complex, and multi-faceted process that requires change leaders and change plans to continually evolve and grow.

• The overall process can be mapped, but the details are highly contextualized; an effective culture change process is locally derived within each of these broad arenas.
TECAID is Transforming Engineering Culture to Advance Inclusion and Diversity.

Announcing:
The TECAID Model for Leading Engineering Department Culture Change in Practice

Available presses and available for downloading on our Resources Page!

Our participation in TECAID provided us with tools and training to start working on [diversity and inclusion]
Thank you!

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