

# TECAID Evaluation Outcomes (Years 1-3)

Prepared by the Center for Evaluation & Research for STEM Equity (CERSE)



## Executive Summary Year 1

- **Team selection process was positive overall.** The initial TECAID selection criteria served the project well. However, second round decisions which were based on the make-up of the teams may not have been as fruitful because team composition changed after selection.
- **TECAID team members were engaged and formal professional development was initiated in Workshop 1.** The focus of Workshop 1 was “Diversity and Inclusion Awareness-Building for Mechanical Engineering Departments: Theory, Research, and Experience.” This workshop brought together TECAID participants, within institutional teams, who shared an interest in and energy for increasing diversity and inclusion in their departments, and this contributed to their department change project’s overall success.
- **Department chairs were conditionally optimistic about climate, cultures, and values in their departments.** They indicated their departments valued: offering students a good education, treating individuals with respect, collegiality with faculty, inclusivity, and having a welcoming image both on and off campus.
- **Participants wanted diversity and inclusion change but didn’t know how to proceed.** Longitudinal baseline data demonstrated that TECAID participants supported systemic diversity and inclusion change, but were unsure how to proceed in catalyzing that change.
- **The Virtual Learning Community (VLC) created accountability but did not initially foster engagement.** The VLC mostly functioned as an accountability mechanism, but initially did not enabled the type of cross-department dialogue which could help each school. It was determined that future VLC calls should try to engage the attendees in change-making discussions, especially about teams’ relevant struggles or challenges.
- **Year 1’s greatest impacts were individual and team oriented.** Year 1 produced outcomes mostly on the individual and team levels. Year 2 focused on the departmental and broader outcomes of TECAID.

## Executive Summary Year 2

- **Participants were equipped for change through Workshop 2, and Workshop 3 provided actionable strategies and increased self-awareness.** The focus of Workshop 2 was “Making Effective Change.” Every attendee at Workshop 2 found the experience useful, and left

equipped to be more effective departmental change leaders, with skills to increase the effectiveness and collaboration of their TECAID teams. The focus of Workshop 3 was “Engaging Subject Matter Experts.” From engagement in this third workshop, TECAID participants gained action strategies, the benefits of intergroup learning, and increased self-awareness.

- **Individuals were committed to diversity.** Longitudinal data demonstrated that individuals perceived themselves as more committed to diversity and inclusion than their institutions. TECAID participants saw themselves as more likely than their departments to take steps to increase the diversity of faculty, staff, and students, improve interactions in their departments, as well as evaluate departmental activities to understand how they impact inclusion.
- **Knowledge and team building among participants motivated action.** According to a longitudinal analysis of Workshop 1-3 data, as participants acquired more knowledge and information on diversity and inclusion topics, they simultaneously felt that there was more to be done, more to know, and more to understand. Concurrently, more individuals were taking action. The workshops also provided a platform for participants to build and strengthen relationships among team members, and TECAID teams had greater opportunity to work together in the workshops over time.
- **Individuals learned new things, teams valued diversity, and dissemination activities motivated others for engagement.** Key outcomes were reflected at the individual, team, and broader scale levels. Individual outcomes involved participants building their knowledge bases that increased their motivation to act for change. Team outcomes included team building and departmental interactions that increasingly valued diversity. Broader outcomes included wide dissemination of TECAID activities and increased confidence in enacting change initiatives at large.
- **TECAID team projects included trainings, pedagogic shifts, and partnerships.** TECAID team projects involved multiple themes, such as: Dissemination, Climate Studies, D&I Trainings, Curricular and Pedagogical Shifts, Hiring and Institutional Policy, Recruitment, and Partnerships and Visibility.
- **VLC meetings inspired collaboration and accountability.** A number of impacts resulted from the monthly VLC calls which evolved over time based on participant feedback. These impacts included the development of team projects and resources, increased accountability, and ongoing community building.

### Executive Summary Year 3

- **Workshop 4 was useful to participants.** The focus of Workshop 4 was “Integration, [Partial] Closure, and Continuity,” which included preparing teams to sustain the project work moving forward without the continued support of TECAID and subject matter experts. All interviewees found Workshop 4 to be useful; it helped people gain new change strategies, tools, and confidence.

- **The TECAID Workshop 4 experience was characterized by knowledge and skill building, and community engagement.** TECAID participants described the TECAID experience as characterized by knowledge and skill building for diversity and inclusion, followed by the benefits of engaging in a community dedicated to change making.
- **Participants developed insight on improving equitable climates.** Between Workshops 1-4, participants developed increased insight on how to improve the departmental climate for staff, faculty, and students from diverse backgrounds.
- **Participants became equipped to act for DEI change.** Longitudinal data showed that participants were increasingly equipped to act for DEI change over time. For example, by Workshop 4, more participants intended to share DEI concepts, had developed stronger DEI change leadership skills, and increased their insight on how to approach DEI issues and how to change departmental cultures for the better.
- **By Workshop 4, all participants would recommend TECAID workshops.** By the fourth Workshop, 100% of participants would recommend TECAID workshops to others, in contrast to 87% in Workshop 1.
- **TECAID informed change efforts of participating teams.** Focus group data revealed that TECAID influenced change across teams related to diversity, equity, and inclusion. Common activities that teams reported included: networking with others, making policy and practice changes, hosting DEI trainings, and making social and infrastructural plans for the future.
- **Participants had suggestions for improvement.** Participant interviewees wanted more educational DEI support; more unstructured workshop time; and wished to continue to improve and refine the VLC experience for continuity, engagement, and team accountability.
- **Individuals increased knowledge, action, and confidence.** Longitudinal analysis indicated that participants increased knowledge and action regarding DEI concepts, knowledge in change-making, and confidence in leadership skills.
- **TECAID teams were engaged in implementing plans to address diversity and inclusion.** CERSE analyzed the DEI related projects and activities that TECAID's five schools engaged in, and their predominant efforts fell into the following themes: DEI Trainings (5/5), Metrics/Climate Surveys (4/5), Inclusive Pedagogical Changes (5/5), and Hiring Changes (2/5).
- **TECAID broader outcomes included building constituencies by TECAID teams and project dissemination which resulted in increased motivation to act by those in the audience.** Broader outcomes of TECAID include TECAID departments hiring external DEI consultants, efforts to build community, and collaboration with community partners. TECAID PIs and TECAID Team members got the word out through presentations and conferences which supported the broader community impact. Attendees from various TECAID dissemination presentations reported learning new things about DEI change-making, increased motivation to learn more and act, and intentions to transfer learnings to their workplaces.