Evaluating Department Diversity, Equity, and Inclusion (DEI) Change: Tips from TECAID’s Evaluators

Wednesday, June 13, 2018 (12:00-1:00pm ET)

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Let’s Use Poll Everywhere!

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Evaluation Webinar Overview

• TECAID PROJECT and MODEL OVERVIEW (2:12)
• How do I GET STARTED and What kinds of QUESTIONS should I ask? (6:02)
• What METHODS should I use? (22:00)
• How do I USE THE DATA collected? (30:55)
• TECAID RESOURCES (49:02)
How comfortable are you conducting evaluation of your programs?

Planning for Evaluation
Did it work?
How well did it work? (summative)
vs.
How can it be improved? (formative)

With what population are you trying to improve Diversity, Equity, and Inclusion (DEI)? (select all that apply)

Planning for Evaluation
Start with the end in mind....Seriously!

SMART OBJECTIVES/GOALS

SMART Goals
Example 1: We will double the number of African American Mechanical Engineering majors by Spring 2019 (from 3 to 6 total)
Example 2: This year, we will increase the sense of belonging of women engineering students compared to data from 2016
Example 3: Student design groups in ME 401 will report a greater value of diverse perspectives in the design process (pre-post)
What goal do you have for your DEI-related change?

- Broad goal: All of our faculty are thriving and feeling welcome.
- Recruit three underrepresented community college transfer students by Spring 2019.
- Increase the number, retention, belonging, and success of women students in computer science.
- Improve understanding of students' perspectives and needs in cultural studies.
- Improve department climate and find a way to measure the climate.
- Increase retention of URM.
- I hope to increase the number of women in my department.
- Increase the number of URM students.
- Improve department and culture of faculty self-reflection.
- Improve culture.
- Improve the sense of belonging for URM students, reduction of stereotype threat.
- Improve climate and retention in the next 3 years.
- A greater sense of inclusion for our undergraduate population.
- To demonstrate and educate faculty on the value of DEI.
- Increase-sense-of-belonging.
- More students from underserved groups.
- Increase enrollment from POC families.
- Improving the sense of belonging for URM students, reduction of stereotype threat.
- Increase enrollment of URM students.
- Increase transparency and fairness in faculty and staff evaluation.
- Change culture.
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- More students from underserved groups.
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- Integrating the number of minority faculty.
- Increase the number of departments using work climate surveys by 10% versus 2017.
- Increased the percentage of minority (15%) to the first-year undergraduate student body in the next year.
- Understand what makes students of color, women, and first-gen students choose to pursue computer science and engineering.
- Establish a better understanding of the current state of our DEI climate.
- Increase the number of female students in the first math course who succeed in the second math course (A, B, or C) within the next 2 years.
- Increase the number of postdoc researchers from underrepresented populations.
- More feelings of community and belonging.
- Improve a sense of belonging within the department among female and URM graduate students.
- Identify and remove barriers to black participation in engineering.
- Give people the language to identify and address DEI issues in practice.
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Data Collection Methods

High Cost/Time
• Interviews
• Focus Groups
• Surveys

Low Cost/Time
• Logs/ Tallys and checklists
• Sign-in sheets
• Minute paper/ Pulse polls
• Surveys

Tips for Survey Creation

• Use single concept questions (not double-barreled)
• Use mutually exclusive categories
• Use recent time-referents
• Use both sides of the scale in the question stem
• Use equal # of positive and negative categories in scales
• Avoid vague quantifiers

See Survey Creation Tip Sheet

Tips for Qualitative Data Collection

Qualitative data is scientific and methodical
Anecdotes aren’t scientific or methodical, but can still be useful
Surveys can be qualitative too!

• Use an observation or interview protocol
• Focus questions on the key areas of interest
• Allot time to analyze qualitative data (team meaning-making)

How Do I Use the Data?

• Develop or modify an action plan
• Share your results! (internally and externally)
  – Celebrate and recognize/legitimize work completed
  – Accreditation outcomes (ABET, etc.)
  – Current or future funders
  – Build and reinforce partnerships
  – Strategic planning
• Supports a systemic rather than individual perspective
  – Other?
In what other ways might you use your data?

- Challenge the traditional culture
- To make changes to non-discrimination laws? Now male faculty became so conned that along with female faculty who can make a change, they hire another female faculty who they have under their thumb. So the female faculty that is truly discriminated against cannot really file a discrimination charge.
- Love convincing skeptical faculty
- Targeted interventions
- Use the data to develop appropriate interventions
- Project iteration
- Figure out why URM students are leaving
- To create trainings
- Show how change in order to inspire continued work in DEI, which often feels very slow and unproductive
- Inform decision makers
- Gain community support for program
- Change the high sense of inadequacy amongst female engineering tech students
- Increase awareness
- To gather feedback about inclusive pedagogy

“Data Use” Poll Results (Continued)

- Develop new questions for further research
- Converse with setting
- Action learning/learning
- For resource allocation
- Increase climate faculty to make
- Facilitated discussions
- To provide pattern feedback
- To encourage enrollment in graduate programs
- Course development
- Sharing with other institutions who can learn from our work
- Accreditation
- Measure change in empathy with educators and K-12 students.
- Measure climate change in education environment
- Inform additional evaluations and research questions

Key Take-Aways

Guiding Questions

- How do I get started?
- Start with the end in mind. Use SMART goals.

Take-Aways

- What kinds of questions should I ask?
- Formative or summative or both? Outputs, outcomes, impact.

- What methods should I use?
- Recognize benefits of qual. and quant.
- Consider user and focus.

- What do I use the data for?

What questions do you have? [Don't leave yet, we have 2 more slides after this!]

- What are your thoughts on increasing the diversity that includes groups that are not traditionally “counted”?
- Most universities are concerned about increasing the number of minorities, but in a minority institution there is also the issue that people tend to think we are already diverse, but some of us think it is not the case. Any comments on this?
- Can you give a successful example: data collection, intervention/action, grown shown in next data cycle?
- I think all studies end up hurting the minorities. The male faculty is smart enough, along with the women who can make a change, they hire women whom they have under their thumb. So a discrimination charge is very difficult to be brought about. What do you think?
- Do you have suggestions of a resource on best practices for inclusive pedagogies?
- Do you happen to have a list of tips to help us avoid creating a positive or negative bias on surveys?

“Final Questions” Poll Results (Continued)

- Is there a repository of surveys or focus group questions for DEI?
- What are some of the most common or rarest examples of “unique case study” numbers based on context and outputs being mutually exclusive.
- If you have a small school how do you measure success statistically?
- If you have a small school how do you measure success statistically?
- What’s the most challenging questions, about how many times / years departments do this process and how far they come... so we know what to expect...
TECAID Resources

Website: www.wepan.org/mpage/TECAID

- TECAID Model & Graphic
- Toolkit & Worksheet
- Case Studies
  1. Working as a Team
  2. Gathering Strategic Information
  3. Effectively Navigating Conflict
- Webinar Series

Please provide feedback on this webinar: https://www.surveymonkey.com/r/TECAID_Webinar4

Once you complete the survey you will be sent to a participation certificate you can download.

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