**2017 WEPAN Change Leader Forum**

**Transforming Engineering Culture to Advance Inclusion and Diversity (TECAID) (Part 1) Overview and Outcomes**

This is a transcript of the TECAID Overview and Outcomes workshop presented at the 2017 Women in Engineering ProActive Network (WEPAN) Change Leader Forum. *[Note: This workshop and separate Part 1 Small Group Report-Out video/transcript, is followed by a panel presentation of representatives from the original TECAID Teams (Part 2) in a separate video/transcript.]*

[00:00:04]
Diane Matt: Welcome to this session on TECAID, which stands for "Transforming Engineering Culture to Advance Inclusion and Diversity". So I want to tell you a little bit about the TECAID project, but before I do that, I want to tell you a little bit about how this session is going to go. One of the things that you're seeing in here is that we have a camera crew and you're going, "Gee, this is kind of unusual. Why do we have a camera crew?" We're actually using this as part of our dissemination work. So we're filming the presentation, and it'll be spliced into some other presentation work that we're filming later during the conference. When you do your report outs from the group activity here, we're going to film that as well. And so if you are the person that's reporting out, we'd like to request that you sign a waiver, a release, so that we can include you in our report-out video. So, that's a bit of logistical information that we wanted to include.

[00:01:09]
Diane Matt: And now I want to explain a little bit about the TECAID project to you. How many people in the room have already heard about TECAID? Okay, I see some, "Yeah. Maybe. A little. Not so much." TECAID is a National Science Foundation funded project. It had several components, all designed to help mechanical engineering teams assume central responsibility for creating, maintaining, and sustaining an inclusive department culture. So these were teams of faculty, senior faculty, and department chairs. We had five of them from different universities. We had Purdue, Texas Tech, Michigan Tech, Oregon State, University of Oklahoma. The project went on for two years with that group. It's still in its dissemination stage. We had four workshops with those groups over time. And we also had a virtual learning community [VLC]. They had a team project that they were working on. And then we had some terrific subject matter expert consultants, who helped each team by "clinic-ing" with them on the progress they were making on their own understanding of what was going on in the project, as well as moving their projects along.

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Diane Matt: So our big objectives were to provide these teams with three big things, really: knowledge, confidence, and application of diversity, equity, and inclusion concepts, as well as leadership skills. Because we wanted these teams to become a node of leadership within their departments to advance diversity, inclusion, and equity. And we wanted them to also gain some skills in change management. So all of those things together, we wanted people to absorb and learn through this program. And we have several participants from the project in the room and you'll hear from them a little later, but why don't you raise your paws right now. So yes, three great participants and some other PI's.

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Diane Matt: We are just in the process now of releasing the TECAID website. And this will appear on the "Wepan.org" site, and you can get there by going "Wepan.org/TECAID". Still partly under development, still coming along, but lots of good things you can see about outcomes and resources. And we're going to talk about several of those things today. And the other thing that I wanted to let you know about is that we have case studies. We developed three case studies during the course of the project, and we have a draft, an initial draft, of that case study report. These are semi-generalized stories about what happened with different teams, and some of them are kind of an amalgam of different teams. But it gives you a sense of some of the issues, complexities, and successes that the different teams had as they went through the project. We're on kind of a tight schedule, so I'm going to click one more, and I think it'll be my turn to hand it off. Yes.

[00:04:56]
Liz Litzler: But you're talking about dissemination.

[00:05:01]
Diane Matt: Oh, I'm talking about dissemination? Okay. So one of the things that we've done also is to make a video about the project that was just recently given an award for the NSF virtual showcase. And you can see at the bottom, "stemforall2017.video", anyway you can see the presentation there. Gretel made this video, but she did a great job. So I'm going to introduce the rest of my team. Liz Litzler is our evaluator. She's from the University of Washington Center for...

[00:05:40]
Liz Litzler: Evaluation.

[00:05:41]
Diane Matt: Evaluation

[00:05:42]
Liz Litzler: And Research.

[00:05:43]
Diane Matt:     And Research.

[00:05:44]
Liz Litzler:    For STEM Equity.

[00:05:44]
Diane Matt:     Center for Evaluation and Research for STEM Equity. It's a new name, so I have an excuse. And Gretal Leibnitz, who is coming in to the TECAID project as the principal investigator. So now, Liz.

[00:06:04]
Liz Litzler:    Yes. As the evaluator, we did a lot of evaluation for this project. And I want to share with you some of the key results. To provide context first, however, I want to tell you about all the, I mean you can see up here, basically all the types of evaluation we did. It was both quantitative and qualitative. And we evaluated each workshop individually, as well as conducted longitudinal surveys overtime at three time points.

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Liz Litzler:    What I'm about to show you are results that, from a statistical analysis of Time Point 1 of the longitudinal survey and Time Point 3. So we used a matched samples sign test to test whether they were actually differences over time in the way that each person responded to the same set of questions.

[00:06:54]     Audio went out.

[00:07:08]
Liz Litzler:    About actual diversity equity and inclusion concepts. And we use DEI quite a bit throughout the presentation as sort of our shorthand for diversity, equity, and inclusion.

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Liz Litzler:    So, [first was] actual knowledge of the [DEI] concepts. Second was confidence and knowledge in actually leading change. So change management, leadership skills, Diane mentioned that earlier. That was another key place. We also saw some statistically significant differences in terms of planning and taking action on DEI change. Now this is something we certainly expected from the beginning. That was kind of the point of being part of TECAID was that organizations were going to do something. So it's good that we saw this statistically significant difference. But I'll tell you a little bit about that in a moment.

[00:07:55]
Liz Litzler:    So I'm going to go through a few charts, kind of quickly, but I'm showing very fast. This was one of the ones about knowledge and use of DEI concepts. So in particular, the knowledge of inclusive culture, and that's what you're seeing here.

People went up, they were much more comfortable at the end talking about or knowing what inclusive culture was. That was also true of micro-inequities as a concept. And those were concepts that people didn't really understand necessarily from the beginning.

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Liz Litzler: Also in terms of knowledge and use of concepts, we saw that people actually use the concepts in their interactions. So not only did they feel like they understood the concepts better, but then they knew how to bring those in to how they interacted with people. This chart here shows just the chart for micro-inequities and how they found that over time, many more people occasionally use this concept of micro-inequities in their interactions. But this was also true of stereotype threat and the value of diversity, so they were more able to understand how to articulate that.

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Liz Litzler: The second bucket that I talked about earlier is knowledge and confidence in making DEI change. What we saw here was that there was increased awareness of the fact that departmental leaders are instrumental in making change. And then we also saw some key differences, statistical differences. These are all statistically significant, in terms of confidence, and confidence in leadership skills, confidence in engaging their colleagues in departmental change, which we all know is a, can be a big barrier because your colleagues don't always want to get involved. And then, also marshaling the resources for change, so understanding where to go to get what you need, so that you can make the changes that you want to make.

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Liz Litzler: So I'll show, in addition, this was that they better understood how to productively engage in the change process. People went from 11% that strongly agreed about that in the beginning to almost half of the people, who strongly agreed. Now, if we had all kinds of time, I'd tell you all about those other lines as well, but we're not gonna talk about that detail right now. In addition, the confidence about actually how to create organizational change went up from only 4% who are very confident to 39%. In addition, you obviously see that unconfident line go from 42% at the beginning to only 9% who are still unconfident in how to make organizational change, so really positive impact here.

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Liz Litzler: Finally, this is the third bucket of planning and taking DEI action as I mentioned, we would expect this to happen. I'm gonna tell you about two things. This first one is about individuals. So we asked about whether individuals were taking actions and whether departments were taking action, and we saw progress in both areas. In this case, we saw that a lot more folks were saying that they had actually helped to implement plans within their department, than they had in the beginning. And finally, this was that the departments were implementing their

plans in the beginning. And only one person, it's 4% on that red line that's on that axis, said that they didn't take any action at all.

[00:11:31]
Liz Litzler:     So, we were pretty impressed with these results in general. We felt like based on our logic model of what we thought was going to happen, some of those key things that we thought were going to happen did happen, so that was a positive result. And I'm gonna let Gretal take it over, about the TECAID model.

[00:11:52]
Gretal Leibnitz: And so now, you've got a clear sense of what we're doing, right. Let's quickly overview that. Five institutions had teams that had identified proposals for change specific to diversity, equity, and inclusion. Those teams, we took through a two-year process with a series of workshops. We evaluated what those workshops did, how did they help not only the individuals, but the team's progress in their diversity, equity, and inclusion goals, towards those goals. Now, we're at the process of, how do we describe this process, all this change, this work that we did, and represent it in a graphic that will have meaning to a person who's naive to what we did? That's what this represents. You're probably going, "Oh, my gosh." Let me walk you through it.

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Gretal Leibnitz: Okay, the first, there were four processes. The first process, not too surprising, we've labeled as "Get started with DEI change." And the things that we lead you through is, how, what are the considerations for engagement and assessing this process? You'll actually explore that first process at your table collectively and get a sense of some of the considerations we've outlined for you, as relatively naive individuals going through this process.

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Gretal Leibnitz: The second process was, after you've been able to articulate and identify, why am I motivated to engage in DEI change for my department, is recognizing that, boy, yes, you could do it alone, but you'd be so much more effective if you can collect a team that's equally empowered and passionate about the work that you're doing. And we talk about, how do you identify strategic members and build the capacity to work together? Because that's a key piece of what we've done.

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Gretal Leibnitz: Third process is then, as mechanical engineers, most mechanical engineers are not experts in diversity, equity, inclusion, particularly at the research and evidence-based data. So how do we help take your change team that are passionate about making and affecting change in your department, how do we gear them with the information to do that work? So, this is part of building diversity, equity, and inclusion knowledge and acting on that knowledge, helping you develop an experiential base that builds your confidence in talking about these issues and effecting change. And the last one is planning, implementing, and

assessing the impact of your work. Okay, sounds great. So oops, I put down the wrong thing, let's see.

[00:14:49]

Gretal Leibnitz: So, those were the four processes. Those are logical, right. You get started, you build a team, you build your capacity of information, you plan and implement the change process and assess whether it was effective. Okay, that makes sense. What we realized though that was central to all of those processes, and it's not just a one, two, three, four, it's a one, two, back to one, maybe over to three. It's an iterative process. But key to all of those things is the fact that you're not just passively learning something, you are acting on that learning, and then you are reflecting and learning about what you've learned from the action. So, it's an act, learn, feedback loop, and we encourage that active engagement at all four levels.

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Gretal Leibnitz: And then, what happens when you engage in change? Even when it's internal, what, is that always easy? Change? My sense is that you're gonna create some conflict or there's gonna be some dissonance, so that is what we've put around all of the four processes. And in academia, as in any place in life, dissonance or conflict is not something we actively seek. In fact, we're very good conflict avoiders, and most of us may not have good tools in mitigating a conflict successfully. So this is a core component of what we're talking about in TECAID. Because in order to do diversity, equity, and inclusion work, we've got to get to a place of authenticity. And that means that we have to create some brave spaces where people can try out language, try out action, as we're trying to engage others in creating a more inclusive environment for our department. That's going to mean conflict or dissonance comes up, and we need to have the tools to be able to mitigate that conflict. So we've created this constructive dissonance cycle. And all of them together will have the outcome of creating an inclusive culture in your department.

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Gretal Leibnitz: So, the overall model again, the four processes that make logical sense with the central organizing principle that you're not gonna be a passive learner, you're gonna actively learn. And that'll come back in a feedback loop, act, learn, feedback, and recognizing that conflict is not a negative aspect of it. It's recognizing that you're engaging in change. Change creates dissonance, that's a natural thing to happen. But what we need to do is make sure that the change or the dissonance that's created is managed constructively, positively, so that we don't bury ourselves, our good efforts, because there's been conflict that's stirred up.

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Gretal Leibnitz: So with that in mind, we're actually done with our formal presentation. But what we'd like to have you do is begin the process for yourself. We've outlined for you

on your table, should be, nope. Nope. I've got my lovely assistants here that will be disseminating our process one.

[00:18:10]
Liz Litzler:     Here's four, they're all the same.

[00:18:13]
Gretal Leibnitz: What we're gonna leave you to do at your tables, is to reflect on the getting started part. Get started with DEI change. We've outlined for you the considerations that our TECAID teams went through, and we want you to reflect on this process for your particular context. We're trying to create a platform for you to be engaged in your own DEI change. You can, what we'd like you to do is work through this as a group, as a table. We empower you to do this however you need to work on it. You can start with the one, two, three, four, and go through the process linearly, or there might be pieces that call out to you, and you might want to start there. So as a team decide where you're going to start. Share your reflections. Work through the process. We're going to give you 20 minutes undisturbed to engage in that work. Then what we'll ask is that each table identify a team leader who will give a summary of the discussion, or the key high points from your table. Liz has a comment.

[00:19:28]
Liz Litzler:     I just want to add that this, what you're seeing here, there are similar sorts of charts for processes two, three and four, also. The amount of detail that we get into, so that if you're interested in, what do I need to think about if I'm building a DEI team, that's information that will come out when we post all of this on the website and share it with everyone. This is sort of a taste. You are in some ways, our test group for sharing this, so we'd love your feedback.