



# TECAID

Transforming Engineering Culture  
To Advance Inclusion And Diversity

WEPAN  
Women in Engineering ProActive Network

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## TECAID Team Representative Interview: Michigan Tech

The following interview was conducted by Diane Matt (original TECAID PI, WEPAN Executive Director) and Nancy Barr (Michigan Tech, TECAID Team representative) at the 2017 Women in Engineering ProActive Network's (WEPAN's) Change Leader Forum.

### Interview with Nancy Barr (Michigan Tech)

[00:00:7]

Diane: So, Nancy, I want to get your thoughts about part of that TECAID model that we looked at and, specifically that ring around the model that we called constructive dissonance because after having participated in the project with you I think there's a couple of useful things that you can tell us about how to get through constructive dissonance and how to deal with that in a way that actually adds to the project?

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Nancy: Well, I'll start at the very beginning which is when we first experienced some constructive dissonance and that had to do with what was going to be the focus of our project as we were putting the application together.

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Diane: Oh, way back then?

[00:01:01]

Nancy: Way back then, yes. Greg Odegaard and I sat down together and to figure out what we like to do and we first thought about doing something with faculty to try to improve the climate of the department we thought that would be a good place to start. And then as, we found out we were accepted into the program and by that point we knew who all was going to – but we knew who all was going to be on the team and it just felt like the faculty aspect was going too big for us to take on. So we shifted a focus on students and that's where we decided to instead focus on developing some teaming modules within the undergraduate curriculum. However, Michelle, another member of our team, who has since moved on to a different university when she came back from sabbatical so she was on sabbatical during all of this.

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Diane: Oh, during that initial –

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Nancy: During the initial discussion of everything, she was not happy with that decision. She really wanted to focus on the faculty aspect. And as it turned out the teaming part was, actually, pretty easy to do. We had that in place before we even completed the second workshop. And we ended up circling back around to faculty development, although now I would say it's faculty and staff development and really inclusive of the entire departments because have grad students encompassed in there we have – I would say, a very holistic approach to this issue now.

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Diane: So it sounds like you started one place, you moved to a different place and you moved back to the first place.

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Nancy: We did.

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Diane: And I know that there – I know that – I'm just going to make this motion and go I know that there was some of this that happened and can you share a little bit about what that was about and how it ultimately resolved because I think that's the constructive dissonance part?

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Nancy: Yes. So it took a while for us gel as a team. We were very different personalities and it was –

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Diane: So there was some dissonance even then?

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Nancy: There was some dissonance from the very beginning and it was hard to figure out exactly why. I felt like one member of the team wasn't really valuing what I had to say. Another member of the team felt like nobody was valuing what she had to say and it wasn't until the second workshop when we started talking about what motivated us in this work. And we started making some of these differences explicit and started talking about some of these differences that we really developed a better understanding of where each other was coming from and that discussion about the different perspectives led to a richer experience for all of us, definitely, and in the end is how we ended up with this holistic approach that addresses so many different factors in the department.

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Diane: So it sounds like you had these conversations where you may be – were a little more disclosing about what motivated you and maybe there was a little bit more what, personal, emotional expression that came out in those conversations. And so I'm curious if those conversations resulted in people sort of broadening their definition of what motivated them or if it had the impact of broadening the scope of the project you intended to do together. So I wonder where the focus of change or the locus of change was after those, probably tricky conversations or, at least, maybe a little uncomfortable conversations? You see me squirming as I say that, right?

[00:05:09]

Nancy: I would say that it had the effect of broadening our focus. We respected each other's perspectives so there was never an issue of – even though some people may have felt that their contribution wasn't being valued, after that second workshop it became very apparent that, yes, everyone's contribution is definitely being valued. So let's talk about what you have to say about this issue and you have to say about this issue and by doing that we were able to come up with a plan that made sense for one thing because up until then it felt like we were kind of spinning our wheels a little bit. We were talking too much in generalities and too much in terms of symptoms and not about getting at the real root of the problem.

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Nancy: So by having those difficult conversations we were able to get at the root of the problem so in engineering design we talk about, okay, so what is the real problem? And that was something we got a better handle on what is the real problem we want to address and then developing a path forward which still doesn't mean that things are easy but at least we had a direction to go in.

[00:06:20]

Diane: So now it's what a year and a half after that conversation something about like that?

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Nancy: Yes.

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Diane: And so you've had some time to work on that project and maybe you could reflect a little bit. It sounds like through this constructive dissonance process that happened in several stages you ended up with a project that people felt comfortable and good with. And now as you look back on that process and where you are now after having

implemented certain pieces of this, what would you reflect for others who were contemplating something like this about that constructive dissonance process?

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Nancy: Well, a number one thing would be don't be afraid of conflict. And also I would say don't try to have those difficult conversations right away. It takes time to build a team and it's tempting to skip over some processes, some steps in the process I would say. However, I would not advise doing that. If you follow the TECAID steps in the process of developing a change project and make – transforming a culture in an organization, it's important to follow those steps because they involve team building and you can't skip over a step.

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Nancy: If we would have tried to have those difficult conversations in the very beginning it would have turned into a debate as opposed to a dialogue but through some of the training that we received and the guided case, so let's talk about this now. By the time that we were sort of sent off like the bird out of the nest, if you will, to flap our wings on our own and fly, we were still a little nervous but we had a lot more confidence because we trusted each other, we trusted the process and we trusted our own abilities to affect change. Because we had started seeing it small ways and there was just a sense of if we can do it at this level we can ramp it up.

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Diane: Make it a little bit bigger.

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Nancy: Make it a little bit bigger and a little bit bigger and that's the real value in this. It's a personal change as well as an organizational change.

[00:08:42]

Diane: Excellent. Any parting thoughts on constructive dissonance? What did you learn personally about how to engage in dissonance in a more constructive way than perhaps you knew when before you started this?

[00:08:58]

Nancy: I was someone, looking back, I didn't see it this way at the time but looking back, I was one of those who would more than ready to engage and debate. I would debate something until the end to get my opinion across. I just had an experience recently where I had the opportunity to debate, discuss or have a dialogue and at first we started off on the debate tack.

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Diane: Sure.

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Nancy: But then in following up I turned it around and decided this person had a lot of passion about a particular topic so I chose to use that passion as a way to open a conversation with her and now we, actually, have a meeting coming up that I think is going to be very productive. That conversation never would have happened if I hadn't gone through the TECAID process. So I now I know how to have an effective dialogue and actually change the conversation from one that feels confrontational to one that actually engages the other person based on what they can bring to the table. And this is someone that, also, has a tendency to want to debate things so I know that the process works with two people who –

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Diane: Are very –

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Nancy: Very strong, yes, very strong personalities. This could work I am a believer in it, yes.

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Diane: So was there one or two questions that you asked when you were shifting into the dialogue mode because I think I would like to write those down. In case I need to know them, can you flash back on that?

[00:10:33]

Nancy: Where does your passion come from? What motivates you on this? Why are you so passionate about this particular topic and what is your perspective on it? What experience do you bring to the table? And then I can share my experience and we can move forward and we may not come to an agreement but that's not what the conversation is about. The conversation is just about getting each other's ideas out on the table so we can build understanding from her perspective and my perspective. So often engineers focus on a problem with the idea of, okay, we have to find a solution. Well, maybe the solution isn't the most important part. It's that having that dialogue, having that conversation and that can be incredibly productive on its own without immediately coming up to a solution.

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Diane: So I'm facing the opportunity, probably, to have that kind of a situation coming up in the next couple of weeks. So why are you so passionate about that, what experiences have you've had that informed your passion about that? Thank you. I'm going to keep those on file.

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Nancy: All right, great.

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Diane: Thanks for sharing this.

[00:11:44]

Nancy: Thank you.