

## FULL TRANSCRIPT OF INTERVIEW ON MICHIGAN CTE RESEARCH PARTNERSHIP November 26, 2019

As part of a blog series, Austin Estes (Advance CTE) and Corinne Alfeld (Institute of Education Sciences, or IES) interviewed Jill Kroll of the Michigan Department of Education and Dan Kreisman of Georgia State University (and Director of CTE) to learn about their research partnership focused on CTE. The full transcript of the interview is below. A shortened version, in a blog post, can be found [here](#).

**The first question we want to ask you both is if you could talk broadly about the project that you work on together? What specifically you were looking into, what were some of the research questions you came up with, and how did you come to settle on those research questions?**

**Jill** – Dan, do you want to give a little summary of how the Michigan work fits in with your bigger Career and Technical Education Policy Exchange ([CTEx](#))?

**Dan** – Sure, I can start with that. I think the CTE work that we do, I think it's fair to say that it started with our relationship in Michigan, and I think Jill will tell you more about this. I was interested in this [CTE research] work, and it was hard to do because you need access to the right type of data, being able to look at what courses students are taking and the pathways that exist. Jill approached Brian Jacob and myself at the University of Michigan several years ago now. I think Jill's first research question was how she could track students into the labor market, and we weren't able to do that right then because we didn't have labor market data. And we're actually still not able to do that right now, but that led to a whole bunch of other discussions of things that we thought were interesting, like just tracking students through programs, following them into college, and now we're starting to think about how we evaluate progress in CTE programs for example, using technical assessments, changes in the way students are tracked through the programs, how many courses they need to finish. So, to say that there is a set research question is not the way I view our relationship. We talk with folks in Jill's office regularly to hear what questions are pressing for them, and then we try to help facilitate answering those and then see where those lead us.

**Jill** – Yeah, I would agree with that assessment. Really, we met multiple times and that it is an ongoing conversation between Dan and Brian Jacob and the research teams in our office.

Just a little background: I'm a supervisor of our Grants Assessment, Monitoring, and Evaluation Unit, which is a fancy way to say I oversee the CTE unit responsible for CTE data reporting and accountability in Michigan, for CTE only. I have two education research consultants, Yincheng Ye and Valerie Felder, so I have a pretty good team and, really, they've been actively involved answering questions and so on when Dan or Brian or one of the students has questions. But beyond that, there's kind of a team of us who are very focused on research and data and so on within the Office of Career and Technical Education (OCTE).

We've also expanded the communication, so Dan and the research team have come a couple of times and presented to our whole office, including our content area experts, our program consultants, and elicited from them what are the pressing questions that they would like to see answered. And then we also had Thomas Goldring, who was a postdoc at University of Michigan on this team, he actually presented on some of the research findings that the team had done at a statewide meeting to the CTE administrators, so we are engaged with the districts, and I think that's really important. So, we're very

transparent about this relationship, that the research team is using the state data, and everybody knows that. And they have been really open to hearing from the field – the school districts – “what do you want to know, what do you need to know, what would help you in your practice?”

Dan was right, I actually connected with Brian Jacob at University of Michigan (and with Dan, who was a postdoc at the time) when I saw Brian present to our P-20 council about some research that he was doing connecting the wage record data for five community colleges. I saw him present this, and I was like “Gee, is there any way you can do something similar with the statewide secondary student data?” So, I went down to Ann Arbor, and we met for lunch, and we talked about how we could go about doing this. And he said yes, it was possible. And then from there, we really had to work within our department to make sure all the I’s were dotted and the T’s were crossed and that I didn’t do anything that violated student privacy laws, that violated department policy, so I worked within our department procedures to find out how we could go about establishing a relationship that would allow this opportunity.

**Would you characterize this as less like a single project you’ve partnered on and more of a years-long relationship that you’ve developed? Have there been any specific research projects or evaluations that you’ve worked on together, or is it just answering questions as they come?**

**Jill** – I would characterize this as an ongoing relationship, but within that Dan has had a big grant and has submitted proposals about particular research questions, so I’ll let him answer that.

**Dan** – I definitely agree with Jill that this is an ongoing relationship where we answer questions that are important to the state and to the individual districts. And within that, we’re able to carve out some more specific research questions that we sometimes approach them with. Our big target is still to track students into the labor market and observe how they take their CTE work there, but we also think about things like “how well do technical assessments measure learning?” Other things, like “what teacher characteristics seem to perform the best,” or “where are there gaps in hiring?” So as we start doing one project, we come up with new questions where we talk with Jill and her team and we say “is this something you’re interested in?” “How can we go about answering this?” And I think one of the important things is we try to think about where there are policy levers, so we want to say “If we answer this question, how can the state or the districts use that information to further their mission of providing CTE programming to students in Michigan?”

**Jill** – I think I’ve been really happy with the extent to which Dan and the research team have really consistently focused on the “so what?” So rather than focusing on vague research questions of interest only to other researchers, they have really emphasized their interest in doing research that has practical application, that can be used by educators in the field.

**Could you share an example of how you’ve been able to use some of this evidence and research to change policy or at least to shape your understanding on some decisions that you’re making at the state level?**

**Jill** – A good example was some of the work that they did for us as we were starting to work on our Perkins V [the Strengthening Career and Technical Education for the 21st Century Act] state plan. There is a really tight turnaround to do baseline data, to make decisions that are data driven, and we as a state had convened a referent group to try to determine what we wanted to consider for our secondary indicator of program quality. States had three choices: we could either do postsecondary

credit, work-based learning, or recognized postsecondary credentials. And we had not delved into the state-level college credit data, so it would have been a really heavy lift for my staff to even work with our Center for Educational Performance and Information (CEPI) to try to develop those connections in time for something that would allow us to make a decision.

Because Brian Jacob, and Dan Kreisman, and all their students had been working with this data for so many years, even though [the data are] de-identified, they had the capacity to very quickly do the matching and come up with an approximation for us about what college credit taking would look like. That's a good example. And what were the strengths and weaknesses they saw in the data. It would be really difficult for our office or even our state as a whole, even with multiple agencies, to have been able to work that quickly and give it the critical analysis that they did. They wrote up a summary paper that we were able to bring to our referent group. You can imagine to our CTE administrators this is a really weighty decision and I think they really appreciated having that summary of what was known. I mean, we did several things, we also met with CEPI, they handle our statewide longitudinal data system, we met with them and confirmed some of the things about the state of college credit data, but the analysis that the research team did for us was invaluable.

The other thing that they did is, our state director was very interested initially in using work-based learning, and Dan and the research team, especially Thomas Goldring who is the postdoc who works out of our office a day or two a week, said that they would be willing to look at the data that we had, and tell us what could be done with it. Well, what came out of that was that it was not in any form that could be analyzed. We would have to start from scratch in terms of data collection on work-based learning, but this was really revealing to our state director, this was an "aha" for him that the way it had been collected was very text-based, and different forms, a lot of PDFs, so the data supposedly was there, but it wasn't in a format it could be easily summarized, or summarized at all without a lot of hours of work. So, he took that information and said "this is a really important thing to know about our programs, even if we're not going to use it for our indicator for Perkins, I want to be able to say something about work-based learning in Michigan in our CTE programs." And so, from that, he has set a policy that we are going to build a consistent way of collecting data on work-based learning. That is another piece where it influenced our practice and also somewhat our policy.

Another piece is, I think one of the most exciting and valuable things that I find about the partnership with the research team is that they look at our data in a completely different way than I do and my research staff do. We are basically staffed at a level that is required to do mandated state-level reporting for federal funding. We often will see things and say "I wish I could analyze this further" and put it on the back burner and say "I'll get to that when I have breathing room." Whereas the researchers have a lot more capacity to analyze the data in a way that we just don't have the time, sometimes we don't have the expertise, and we don't have the ability, sometimes we just don't look at the data in the same way. So, one of the most exciting analyses that they did was really to look at the student data from a cohort perspective. And as a state office, we're very boxed in by our reporting cycle. So, we think in terms of "we have to analyze this data: what happened in 2018-19?" and we report it at the end of the year for the consolidated annual report, so we think of the data as snapshots in time. And because that's what we do all day every day, the benefit of interacting regularly with the researchers is that we go "Oh! I never even thought of looking at this this way." They did this analysis that I thought was very interesting. They looked at differences in program participation by race. And then they went a step further and did a regression and looked at what are some factors that could

explain any differences found. And that's just not something that would have occurred to me. So, they look at things a different way and they have tremendous capacity to really dig down and get into the details.

**That's great. And what I'm really excited to hear is that you've built such a relationship and channel of communication that you're able to respond to questions as they come up from the state office and to add some additional capacity to answer those questions. Dan, I'm wondering from your perspective, is there are any critical lessons that you've learned around specific policy levers or strategies that have been really illuminating?**

**Dan** – I appreciate all the things that Jill said. If we're adding value, we feel like that should be our number one priority. There's a flip side of the way Jill said that we're able to answer things that they maybe don't have the time or capacity to do. Without their input, we often are looking at data and get stuck and say "I don't know what this means" or this thing changed, or we just can't make heads or tails of something. And we can get on the phone or write an email to someone over at OCTE and say "Hey we're seeing this thing. Can you tell me what that means?" And someone will come back with a really long answer that says "Oh, the system changed" or "There was this one policy," and "Here's what you have to do to make it fit everything else." And this happens all the time. And we would completely lost without this open channel that we have to their office. And that falls under "we have a good relationship," like you said, there's a lot of trust between us, and we're careful to make sure that we understand that they have tons of constraints on their time, so we don't ping them every time something comes up, but they're really generous in answering questions that we couldn't do the research without having good partners over there.

And that extends beyond just the people doing data work there. That goes to the program directors and all across the board, and it's up and down in the organization, too. There's buy-in from the CTE director in Michigan who comes to the meetings and is part of the discussions on policy questions or research questions. So, that's a really big part of it.

I think the second thing I would add is, my recommendation in addition to building a really great relationship and letting the state or the districts drive the research questions, is to not dismiss the power of good descriptive work. Lots of times, the questions that states are grappling with can often be illuminated with some really careful and good descriptive work. You can say "This is what we're seeing, this is the big picture" if you step back for a minute, and that information lots of times has been as valuable as the stuff we try to do that is more causally oriented in our research.

**Jill** – I would agree with that. I am always surprised by that. I came into my first work all excited to do regressions and so on, and I've often, in the 20 years I've been in state government, I've several times tried going out to CTE administrators and saying "Is there something you really want to know?" Dan is right, what they really want to know is often pretty much descriptive. So, I think that is correct.

I also want to follow up on the whole issue of how important trust is. I cannot emphasize enough how important it is to me that Dan and the other researchers come to us with those questions, that they check in and say "Hey, this is what we think we're seeing," and we have the opportunity to say, "Well, you know, here's what was happening that you don't know about." That's absolutely critical. I think the relationship between researchers and state offices can be somewhat fragile because trust is critical, and if state staff feel like they turn over their data, and then they never hear from the

researchers again until they publish something and then you read it just doesn't reflect reality, I mean I appreciate the commitment on all sides to the truth, to really understanding what the data are saying. From the state side, if that means that it's something that shows up that it's something we need to do better, it's accepting that, but also that it's the truth. I actually interacted many years back with another researcher that was doing an evaluation, and I wrote into the agreement between us that I had the ability to approve before something was published because the people who came before me had said, "Hey we've been burned by this person in the past," so I wrote this into it. And when it came time to publish this book article, I read through the article and I said I'm good with everything except you have this conclusion that doesn't reflect what was really going on. So, you're saying this thing happened but, in fact, it was a policy decision. And he wouldn't change it, and I wouldn't budge, and it never got published. So, the trust is absolutely critical. And I have been very appreciative of the extent to which Dan and the research team and the students and postdocs are willing to ask and listen when we explain what's happening so that they have a good understanding of the data they're looking at. As anyone who works with any kind of data knows – but especially the detailed data that's out there on students and programs and education – it's just so complex. If you link to tables wrong or misunderstand a field, you can come to a completely wrong decision, and so that communication and that interaction and trust is key to accurate outcomes.

**You alluded to some potential challenges, especially early on about data security, making sure the data's clean, establishing that trust. Could you talk about some other challenges that you faced early on in the partnership or maybe some other challenges that you continue to face through this partnership?**

**Dan** – I don't know if we have any major ones. We have a really good relationship. Most of our challenges have been about getting access to the right data to answer the questions we have. But I don't know if that's necessarily a challenge. That's the evolution of the research. We'll come up with a question with Jill and her team and then we'll say, "look, we don't actually have the data to do that, so what do we need to do to make that happen?" And one of the things that's been able to facilitate that is when we've had folks go visit the state office. We had one of our postdocs going there somewhat regularly, we have lines of communication now, and that facilitates some of those data challenges now having someone who can work with the data on site and be able to poke their head around a couple of cubicles and ask a question and kind of move things along.

**Jill** – I'm on the same page but the two things I listed as challenges – one was getting the Unemployment Insurance (UI) wage data. The other one was OCTE staff finding time to answer some of the questions and trying to check calculations. So, for example, the researchers work with de-identified data sets. The student IDs that state staff see – there's a unique identifier that's linked to student names and all the student information that state staff work with regularly – that's not shared with researchers. There's an elaborate process in which a research identifier is substituted for the student identifier so the researchers do not know who the students are. But if they see something really odd in the data, one thing we have the capacity to do is actually run an analysis or something parallel or even just count using the live identified data. But finding time to do that can be a real struggle. So that's where it was really invaluable when Alfredo and then Thomas spent time in our office. They were actually hired as unpaid interns of the Department of Education, and as interns they signed a confidentiality agreement that I have state staff sign and that I've had other unpaid interns



sign (so this is something we do regularly), and then we can give them that task of validating with our actual state data and that relieves my staff of having to do that. And one of the things we've also talked about is when they have additional capacity then maybe they would have time to help our office staff too. One of the challenges is that we're in Lansing and most of the students are based in Ann Arbor, so it's an hour and a half commute each way for them. But that is a great solution, having a member of the research team or a student of the research team housed in our office. It improves the ability to communicate but also expands our capacity to support the research and also our day to day work.

**As you're both looking ahead, now is a critical moment as you're preparing for Perkins V implementation and preparing the plan – and there's a lot of data analysis that goes into preparing a thoughtful, evidence-based plan – but looking ahead over the next five or so years, what's next on the agenda, what are some of the research questions and priorities you have for this partnership?**

**Dan** – Number one is tracking students into the labor market. That's our biggest and most outstanding question. And to the degree that CTE programs are preparing students for college and the labor market and career, only being able to evaluate half of those is pretty difficult for both sides. In terms of other projects, we started to take on new data, one of the things we're interested in is technical assessments. We're also part of a consortium of several states – that's the [CTEx](#) group – and we meet annually together – and that allows us to harmonize things across states to see how trends are similar, how enrollment rates work, all sorts of different questions. And that's become an unexpected win where we said, "oh this is really interesting," and everyone in the group had the appetite to do that kind of research. And then maybe one of the more pointed questions we're thinking about is how do students choose which programs they're going to be in? We've talked about trying to elicit that type of information from students and think about types of nudges or informational campaigns we could enact somewhere to think about how students align themselves with which programs they want to do, at least that's one of the questions we have on our end.

**Jill** – I think that pretty much sums it up. At the last CTEx meeting, states and research team groups had time to go off with the researchers working with our state data and talk about what were some of the pressing policy questions and other data questions that we had as a state and identify some of those. That allowed us to think about what types of things were interested in in the future. One of the things we're talking about right now is that we don't have, in an accessible form, data on access to a particular program. We know that career centers serve certain districts but if someone asked if student A is going to Central High School, what programs do they have access to? We don't have a good way of answering that at the moment. We've had a couple of discussions about how between us, the researchers and our office, can work together to build basically a dataset that clarifies that. That would be mutually beneficial and would take resources from both in order to do something like that so we can get at the questions about access and where are gaps in access to CTE.

**Thinking back on this partnership, is there any advice you would give to other State Directors or CTE researchers? This blog series is intended for both audiences, so I'm curious to hear from both of your perspectives, what would you tell State Directors and researchers to establish other similar partnerships?**

**Dan** – Building a strong relationship is the first thing you have to do. And part of that is spending time face to face talking about questions, moving around ideas, looking at data together. We had the benefit of a long windup period. We spent at least a year just talking about questions and putting together data before we even started doing any analyses. And having the right people at the table. We had buy-in from Jill's office up and down the line, from folks who were doing the research to people who were in policymaking roles. And without all of that, none of this would even have been possible.

The second part is to not downplay the value of just providing good information. A lot of us on the research side don't realize how little time folks in the state offices have to take a step back and say what's going on with our data, let's look at the big picture. And one of the things we can provide them is just giving them that big picture and handing it to them in a digestible way. And doing that is the first step, is a really good way to start building that trust. They really see the value of what you can do early on. And then you can start to get into more difficult or longer-term questions.

**Jill** – The advice that I would give is: Do it! Partner with researchers. I can't say enough positive about it. The second one is: Follow department procedures and be transparent with department leadership. You know that windup might be really, really slow while you jog through the channels that you need to in your department to do things by the book, but I think it pays off in the long run when you have the buy-in all the way up the line and you don't ever have to worry or hold your breath that this person didn't know that this is happening and now it's gonna happen. And that also helps when there are transitions. Our state director has only been with us about a year and a half. We were well into this partnership when he joined, and it was good to know that everybody up and down knew about it so we could bring him on board and say, we have this really cool thing going on and the department's on board.

My third one is: Be transparent and open with school districts. Share what you're doing and invite their input. Anybody who works with state data would probably know that you're always a little hesitant about what the public would think about this use of data. And yet I think, particularly the way that Dan and the postdocs and graduate students have openly shared the work that they've done with our CTE administrators, has really helped in that I have not gotten any doubt from [the districts]. They are very excited about this partnership and they look at some of the presentations and go "can you do that for my district?" so again, just being transparent and making sure that everyone knows what's going on has paid off too.

And identify research that has meaning and can be applied – the "so what?" I remember in graduate school I studied applied research, and I remember coming up with some great research questions for my master's thesis, and the chair of my committee looked at me and said "so what?" So I think research that answers the "so what" is critical.

And finally, I'm echoing what Dan says: communication. It's critical that there be a deep understanding of the data so anything that's published is accurate. Sometimes state staff have a deeper understanding of what the findings mean than what is evident from just looking at analysis results, and so I think that really ensures the value of the research.

## **Is there anything that we missed? Is there something we should have asked about?**

**Jill** – One thing might be asking Dan about how he funds some of this.

**Dan** – So, how do we think about funding this? I think we demonstrated to the funders that generously funded the first round of activities that we have two things. Number one was that we had a good relationship. That was really important, having that established when we went to seek funding. And the second one was the need for this type of research. A few years ago when we started all this, there was not so much work being done in this [CTE] space, and we were able to demonstrate that this was an important time to leverage these types of partnerships. That's how we were able to get it off the ground even without a big specific randomized control trial we were going to do. We said that it's really important that we can provide a lot of valuable information to the state by creating this partnership, and they were trusting that we would come up with good research questions and leverage that partnership, and that's paid off really well.

**That is really important for other people to hear. You're probably a pioneer in doing this kind of thing, and any advice you can give to other people who are trying to set up a research partnership and make it sustainable is really helpful.**

**Dan** – Of course. That's a big part of it. And it would be untrue to say that the funders aren't playing a big role in the work we do. We're really thankful for them and their far sightedness in the projects that were doing.

**Jill** – I just want to say the CTE annual meetings we've had, from the very first one, which was what, five years ago Dan? The person from Switzerland, Ursula, I found it so energizing and exciting and interesting. The sharing with other states and hearing some of the more cutting-edge things that are going on in CTE. Every year, it's just energizing and exciting. Our new State Director got to go to the first year, and that was it, he was totally on board. And this year he was unable to. We had all signed up and he had his tickets and everything, and there was a crisis back here that he had to deal with, and he couldn't go. He was so disappointed because it's such a real highlight. I was amazed this year by how much I learned from sharing with other states that do this similar work and the things and insights that they gained. I came back and I said "Whoa, I hadn't even thought of this" and "We need to look into this in our state." So that's important I think too, is just the sharing.