**Knowledge Brokering in Vocational Rehabilitation Agency Contexts**

*Presenters:*

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Transcript for audio/video file on YouTube:

<https://youtu.be/qgXbVIhcSIQ>

(Audio begins at 30 sec.)

>> KATHLEEN MURPHY: It's not just the KTER staff, it’s not just our subcontractor, CSAVR. A key thing about knowledge translation is that early and often, you engage as many people who are ever going to care about what you are doing. We work really closely with advisory boards, but they are on our website and in our official proposal ‘technical working groups’ (TWG). So they've provided guidance on research activities, they’ve helped us share information about the studies, they've looked at every instrument and protocol we've done, they've participated in webcasts. They continue to promote our activities and we really appreciate them.

We really strive to have a heterogenous group involved so we have some disability-oriented leaders. NIDILRR, I think everybody would know, but it's the National Institute on Disability, Independent Living, and Rehabilitation Research, our funder. Some of the grantees are involved. We try to include consumers, as well as people like you from VR, and businesspeople.

Since a lot of times in life, you know, it's kind of like who you know, right? One of my first jobs was working for a US Senator and the first thing he would ask about any legislation is, well, who's sponsoring it? So, we are very proud of our TWG members and some of you may know them, so I wanted to share with you who really has been very involved. Frank McCamant is a Texas level leader so if you are not from Texas, you may not have heard of him but he has worked very closely with us for many years on our autism research, not just this project but others as well. Carol Schall some of you may know, from Virginia Commonwealth University, like our friend Amber here--we love VCU. Stephen Shore has been involved in several autism organizations and provides us with an important research and consumer perspective, as does James Williams from St. Edwards University, who, like Amber, also brings in a VR perspective for us.

The Center, and I'll explain more about, what are you talking about autism, transition, why these two topics? But we also have a transition-oriented TWG; Teresa Grossi is presenting for us later today. Dr. Marsha Langer Ellison is very involved with many projects at AIR, including this one. Sandra Miller, from Delaware, has brought a VR perspective. We just talked to Rachel Anderson a couple weeks ago with some questions, and Dr. Marcus Poppen from Washington State University.

So, later on when Melissa is talking, she is going to be talking about some check-ins she did with people who participated in our knowledge brokering study. When they had questions, we would try to answer them but often we couldn't, so it was these people we would refer those questions to. We don't really know how much work there's going to be, how many inquiries you're going to get from the field‑ so we really appreciate their generosity in helping us.

So if you just look at the name of this center, right? And we didn't name it, NIDILRR did. Especially, we love our project officer, Dr. Pimjai Sudsawad. So, it's got two phrases there. It's the Center on Knowledge Translation for Employment Research. Part of my job as the PI is explaining that we do research. This center is a research project. We do do development, technical assistance; I'm not talking about that today. You'll have to go to our website and please sign up for our newsletter and you can find out all about our great dissemination and technical assistance and development activities.

But, part of knowledge translation is research. It's not just, oh, great, there's a finding. Let's do a webcast, let's stick it out there in some way. Do a newsletter; let's text it out. It's figuring out, how are you going to do that in a way that works? So, that's what NIDILRR-funded this center is to do, is to test a knowledge translation strategy.

The other half of the time, I'm telling people, no, we don't do disability research. We don't do disability employment research. So, especially at AIR, my colleagues--I think right now, the labor economists at AIR are presenting--they analyze giant caseloads data. We will do that, but the goal of our analysis is to figure out, did the KT strategy work? And of course, the ultimate goal of the KT strategy is to promote the employment of people with disabilities, but we are a research-oriented KT center that works in the domain of disability employment research.

I'm just looking at my bullets here to see, did I really cover everything? The second one there, it talks about increased adoption and use of relevant research findings funded by NIDILRR. So, there's two ways we do that. One is, we're funded by NIDILRR so the research that we promote, we prioritize NIDILRR-funded work. Obviously, if someone else is doing some great thing, and we can get it out to the community, we'll include it in our scoping reviews or we have an employment research database. But our job is really to help NIDILRR leverage that investment that it's already made in a lot of projects.

And the other thing that we're supposed to be doing as we do these studies of KT strategies, they're demonstration projects. We need to do something that another grantee could replicate. In some ways, it's a creative tension. You can't do something that is super expensive because no NIDILRR grantee would ever be able to replicate it. So our job is to test these strategies, but only strategies that other grantees could emulate.

This particular RFP, this is what we had to do, this is what Dr. Sudsawad probably wrote. She said, all right, KTER Center. You figure out first--we didn't have to work with VR, just disability employment research--Where are stakeholders' needs for research-based knowledge, most pressing? Right. You start with your audience. Then, we're a NIDILRR-funded center. You work with employment centered grantees and find out which of their research findings will address those needs of the grantees. That's why we include them in our TWGs as well as prioritize in our literature reviews in our projects, we'll start with NIDILRR projects.

And then, once you know, what does your audience need? What is the best research that NIDILRR has funded to address those needs? And then part of that, too, is figuring out what audience needs, you can't answer it with research. So, you've got to figure out, okay, we see your panoply of needs here, that's great. I can't help you with figuring out your IT system at your agency. I can't help you, really, this was five years ago, with figuring out, what kind of social media could you use because there's no research about it so we have to pick a question that you can answer with research findings.

And then you know what you can do for them. Here's the research. Here's your question. Who, you know, given you've already defined your audience in this whole scenario? Well, how do they like to consume information? How are you going to get that research out to them? And that's the part where I think people associate the most with KT, and there's a lot of focus usually on the strategies. Should you do a Webcast, should you do a training, oh, no, that's sit and get. One and done. You’ve got to do follow-ups, so you really need to think through and there is some research about that.

It's not in our references but there's a really great systematic review or several of them with the Cochrane Collaboration. Do you know what I'm talking about? There are a few systematic reviews. It's oriented to medical audiences but they have looked at specific adult learning strategies and outreach.

Okay, I mentioned that we start with NIDILRR. So, here I am, you know, it's the spring of 2015, I'm writing this proposal, trying to figure out what are the pressing issues in the field? It's obvious that looking at, what has NIDILRR funded, what research does NIDILRR have to address any of these pressing issues? They've already invested quite a bit in projects on vocational rehabilitation and transition. And I apologize for those acronyms. I really hesitated last night because I made all the font ginormous so that everybody could see it and I could not fit in the acronym explanation but that DRRP, at the bottom is disability and rehabilitation research project. That's what KTER Center is, we're a DRRP. And the RRTCs are rehabilitation research and training centers. So, of the types of projects, the funding mechanisms that NIDILRR funds, these are the biggest ones that do research. You probably know this about NIDILRR projects, but these are the ones that are really going to be able to do KT or contribute the most to the field. So I thought it might make sense to work with VR in the domain of VR and they already have a lot to say about the employment of transition-aged youth. So, what else? When you're thinking, hmm, okay, how else can we figure out what we should do?

This is the second award cycle for the Center on Knowledge Translation for Employment Research and the previous one, which was 2010 to 2015, we developed a survey. We worked closely with Carole Estabrooks who is a scholar in Canada--we love our Canadian KT scholars--and she had done already a validated survey about how can you get or measure whether or not nurses are using evidence-based practices.

So, we look at that, we thought a lot of those questions could be adapted for VR agencies. She shares copyright with us, but we translated a lot of her items from the medical lexicon into one that works for VR, and we called it, making research work in VR agencies.

We administered that in six states; 535 VR counselors participated. One of the questions was, Tell us what area of your job do you think information about evidence-based practice would be helpful to you? And there were 457 comments, so we looked at those, and of those comments, 42 percent referred to a lot of things about running a VR agency. Policies, procedures, how do I deal with my caseload size, how do I do a better job with intake and assessment. How do I write an individualized education plan, case management? A lot of those things, to be honest, not a lot of research about those. That's great, we understand why you're concerned about those, but I can't help you.

But, a third of them were concerned about specific populations. So, individuals with severe mental illness. You know, we would like to see more research about how to serve those people better. Transition-aged youth. Adults with autism. Those all came up.

Now, I think I cut this slide, but another, I think everybody realizes, an obvious reason why we're focused on transition-aged youth and that's because right at just a year before, we were putting this project together, the Workforce Innovation and Opportunity Act (WIOA) had passed, requiring agencies to set aside 15 percent of their budget to focus on transition-aged youth. Obvious, no brainer. If you're going to look at pressing needs in the field, include something about transition-aged youth.

We also, and Ann Outlaw is with us here. Sorry for the camera. But she just waved to us for those in the room. She's worked a lot on autism in VR projects. We've done systematic reviews for the Campbell Collaboration on the employment of people with autism. We had a lot of capacity in that area and it was NIDILRR-funded so, again, we should include that in this.

So, you’ve got a rough sense, now, your domains, NIDILRR has some research. Remember, there's that knowledge translation part of this. How are you going to get that out--you decided VR is your audience?

So that survey we administered for 535 counselors, well, surprise, surprise. If the VR counselor is going to use research incorporated into that IEP, care at all about it, it matters if their supervisor cares. That's true of everybody. We all do what our bosses want us to do.

So, the supervisor are a real key lever here. If you want to get uptake among the counselors, you’ve got to work with the supervisors and get them on board to think it's important, and teach them about the latest and greatest about transition aged youth or the employment of people with autism. And this is also consistent with a NIDILRR-funded RRTC that had done a similar survey and found a similar finding. Some of you would recognize those names. They may be here…Tim Tansey, Fong Chan. We love our grantees. We thought, that's great.

We also, I mentioned, work with CSAVR. Now we're getting at the director's level -- what do they care about? And they also, in a survey of the top three issues their agency faced, cared about transition-aged youth, cared about autism, and then this general area about human resources, client services, return on investment, kind of more business-oriented kinds of issues about running and delivering government services.

This is how we got to where we are today. We're going to look at the central role of VR supervisors in promoting evidence-based practice. We're going to have three tracks because we're going to run three studies promoting three kinds of research, on transition-aged youth, adults with autism, and then we also included a track on VR outreach to business. And at the strong advice of John Connelly and Kathy West Evans we kept that at the end of the cycle and Amber and I are presenting on that tomorrow at 4:30 so that's not part of this presentation but it is part of the KTER Center work.

We also, and this is a little plug for our follow-up roundtable that's happening in the hour after this. We're giving you a 15 minute break but if you want to come back and hear more about what we learned in our focus groups, this is part of figuring out pressing needs. Now we're funded. What do people want to know? What are their informational needs?

So, we did transition-oriented focus groups figuring out, here's a broad set of things that NIDILRR has funded, here are some buckets we can look at. What do you really care about? Supports and training for family. Do you want to figure out how to tailor VR counselors' training for transition-aged youth? Are you more interested in long-term support for employment and career? Self-employment, self-empowerment, work experience? This, I think, came out of this survey. I'm looking at that, that's such a negative topic “When VR poses barriers to employment success.” It was the counselors themselves, kind of talking about that in the original survey that we did of the 535 of them.

And similarly for the autism. We had to kind of narrow it down. Here's a bunch of things that are research oriented or that we think you might care about. What should we really get into and find out more about? The types of jobs in which people with autism do well. How VR counselors can help them. There's a lot of good case studies about what's going on at Walgreen's and Project Search, all their sites, AMC theaters. Is that what you want to hear about? Do you really know about autism? Or do you need, maybe a little ‘Autism 101’ about the condition itself? Is it more finding jobs or is it more getting hired on the job? Do you want to look at internships or preemployment training specifically or other kinds of training?

The point of all that focus group activity, which we have summarized in tech briefs, and we have copies of them so if you come to the roundtable, you'll get a party favor. The point of that, if you remember in our research trajectory what we had to do was do these needs-based, then we needed to like consolidate, synthesize the research on that identified topic so we chose to do scoping reviews to answer this mandated question: What NIDILRR-funded and other research findings can be used to meet what people tell you they need to know.

So, oh, yeah. I've heard of scoping reviews. Wait a minute, I've heard of systematic reviews. I've heard of meta-analyses. What's this thing? Okay. So, the scoping review, the idea is you want to figure out the landscape of the research. What is out there? You want to be kind of fast, right? It's only a five-year funding cycle. We want to test three KT strategies.

Systematic reviews like in our previous award cycle, we did two of them. We didn't finish, frankly, until year five. So, we've got to be rapid. We've got to figure out what are the key concepts in the field related to this narrower topic that we've figured out from the focus groups. What key concepts that underpin our research area and kind of what's out there? What are the main sources of research? What types of evidence is there in the research studies that have been done on transition-aged youth or the employment of adults with autism?

So, the purpose is different than with a systematic review. With a systematic review, you already know what intervention you want to find out about. It would be like; you could do a systemic review on Project Search. You could do a systematic review on the role of a centralized accommodation fund in a business. Systematic reviews are narrow. You need to know. You need to have already done some version of a scoping review to know what an appropriate topic for that systematic review would be, because you're looking at all the research in the world ever published on that thing. So, your topic needs to be tiny because your search is ginormous.

Scoping review is a little bit different. You've got a bigger set of studies that you're willing to look at so you're going a little like skating, just kind of looking, what's out there? What's the range? What kind of research activity has been done on this? Should we do a full systematic review on any of these topics? And yes, let's be able to tell the field, we're going to summarize, this is what you want to know. Basically, these are like the main takeaways in this topic. But, guess what? The stuff that you're going to find out. Oh, my gosh…Absolutely no research about a lot of stuff. It's hard to like to think of zero.

So again, we're a KT center. That's great. Your systematic review is done. You've got the answer to your pressing needs question. What are you going to do to get it out there? We decided we were going to use this: Focus on the supervisors, and we will hear more at lunch from Maureen Dobbins who has done a lot of studies on this thing called knowledge brokering.

So, a knowledge broker is in some ways probably what all of you are at your agency and what the KTER Center is. You're there figuring out how to bring together those worlds of research and practice. We thought, we are going to train up these VR supervisors in ways to be knowledge brokers, we’re going to try to give them continued coaching and see--does that increase the uptake of VR counselors’ use of research? And of course, who cares if everybody is using research if it doesn't make any difference to consumers? So we also said in our proposal, we'll take a look. Did it matter to the caseloads of our participants?

Our study design. We thought, we're publicly funded. That's great that there's a lot of private practitioners out there doing VR; we're not going to look at you. You need to be working for a state VR agency--that's our mission.

And we need a sample of your counselors, you are brokering to whom? We talked to John Connelly again, at CSAVR. We thought, a good cutoff is four., four people that they supervise. We had a measure I'll talk about in a minute. Once we got people in the door we did the screening. Yep, you work for a state VR. You supervise at least four counselors. Then at the state level--that's an important thing. It gets really confusing and complicated and poor Amber is stuck dragging you through the slides of how everyone funneled through our study. At the State level, we randomized, not at the individual participant level. Then we had a training group, around half. Because it was at the state level, we balanced the groups.

So, this was our knowledge broker intervention. Now, keep in mind, what you're going to hear at lunch from Maureen is very different, but I don't know if what she's talking about your regular old RRTC or DRRP could replicate, never mind a smaller project. We had to do something affordable. So, what we did was a self-paced online module on adult learning principles before, and then we did others about the topics.

So, you're like, whoa. I didn't hear anything about adult learning principles in your research tracks. Where did that come from? We work at American Institute for Research, we’re a big company, and at AIR there's a group of people who work on technology solutions and have training in adult learning. So we said, hey, help us out here. They said, sure. You can't just tell people, “Here's the research. Good luck.” You need to tell them, what are good ways for them to pass that on to their staff?

The module was about making sure that you're not just handing people an article or that you're thinking about how is this going to apply in the jobs that you're embedding, that you're bringing it up a lot. That's how they started off and then we packaged our scoping review findings into other online modules. I’m deliberately not talking a whole bunch about what this training is about content-wise because we're still recruiting. If any of you are VR supervisors, and supervise at least four staff and are from the states that Amber is going to talk about in our training group, you are more than welcome to join this study.

After we had confirmed that people are done at least two of the modules, the adult learning one and you did either the one on transition-aged youth and transition preemployment services, or the adults with autism. Then my colleague, Melissa Scardaville, checked in with you every month. How you doing? Do you need anything else from us? Would you like me to pose that question to our TWG? So it wasn't just a one-off training, it was ongoing offers of support. Whether or not people take you up on that offer, I'll let her tell that story.

I mentioned random assignment. What about all those control states? The people in the training, we offer them five CRC hours. We thought, we don't want our poor control group to be left with nothing, like, hi, could you just do our surveys and we'll give you gift cards? We arranged for them to get a voucher for five hours from a CRC-accredited course. We looked through all of them. So many were about transition-aged youth so we had to knock all those out. The one course we found that had nothing to do with what we were training on was an ethics class on wellness. I thought, I want to take a wellness class, so that was our control training.

The survey. We've already talked about this survey. Basically, we did a few modifications to that “Making VR Work” survey, but we used if again so when people sign up, there's a screening and then they do this survey. It has three sections related to impact and what we're going to talk about today is one that measures research orientation and that included items that related to attitudes about research, knowledge about research; not really like a test but reported familiarity with research. What kind of behaviors are included in IEPs?

Then there was a second session about what kind of resources do you find useful for your job and what kind of interactions do you find useful for your job, because a key part of knowledge translation science is, relationships really matter. The relationship between the VR supervisor and the counselor matters. How much people like Melissa calling them on the phone is going to matter, right? I'm sure they loved you. And as an outcome measure, we repeated the same survey and then we asked the people who signed up, please give us names of your staff so that we can run this survey with them. We fixed it up so that the items made sense for staff. Or, we gave them the generic URL and said, that's fine. You don't want to give us your staff names, we get it. Please get them to do this survey. Then we repeated it when all the check-ins were done

Other data we have: those three course modules (adult learning, transition-aged youth, employment of adults with autism) they do have embedded pre/posts that we're looking at. And back to who cares; we are requesting from the states that had at least some people from the state participate in the training, and our controls to give us caseload data so we can look and see across the groups if there's a difference.

I mentioned that Amber is going to walk you through how people signed up and what happened to them and here she is, Amber Brown.

>> AMBER BROWN: Hi, everyone. In our study sample, we had 110 people, our supervisors enrolled. And we split them up by state and within those states, 54 participants were in the training and 56 were in the control group. So, within the training, we had three different types of people because some people did not complete the training so the people who did complete the training were 20.

Our intent to treat group - these are states who did not have anyone from this state complete it, these are the intent to treat group, which is 17. Our attrition people are the people who were in state who some completed, and these people did not. For example, there are people who completed the training in Virginia but the people in the attrition group were the people who were from Virginia but did not complete the training.

Our sample baseline demographics are pretty much the same. So, the mean age sample is roughly 45 years old and our sample was predominantly white, about 85 percent. And around at least 85 percent of our participants hold CRCs, which we did expect because these are supervisors who have higher level training and experience.

Most of our supervisors also supervised around eight staff members. In the study, we had 35 states, including Puerto Rico. So, we had a pretty good sample size. In the training group, we had Arkansas, California, Hawaii, Louisiana, Massachusetts, Michigan, Minnesota, Missouri, Mississippi, Montana, New Jersey, New York, Ohio, Oregon, Rhode Island, Texas, Virginia, Wisconsin, and Wyoming. For the control group, we had Arkansas, Colorado, Washington DC, Delaware, Florida, Georgia, Iowa, Illinois, Kentucky, Nevada, Oklahoma, Puerto Rico, South Carolina, Tennessee, Utah, Vermont, and Washington state.

This is our within-group table showing how these participants were broken up and how many participated from each state. It's a pretty busy table so it holds a lot of information but the most important thing to know is which states are within each group and if you have some specific questions about your state, please let us know and we can discuss it.

All right, and I will hand this over to Melissa to talk about our measures, more descriptions of our measures.

>> MELISSA SCARDAVILLE: Hi. I'm Melissa. We wanted to do, originally, as Kathleen was saying earlier about the survey, it was a five-point Likert scale. We didn't want to have that middle where it was like, I don't know, kind of neutral, so we had a four point: strongly agree, agree, disagree, and strongly disagree. There were three overall sections; we talked about research orientation, the perceived value of various resources on the job, and then the perceived value of different interactions on the job.

The research orientation scale was on 23 items. We're not going to go through all of them today, but they were “I encourage my staff to participate in trainings,” “I'm willing to try new ideas based on research” because as Kathleen said earlier, if you have a supervisor that is really supportive of research then you, as a supervisee, it's like, okay, I feel like I want to do research. I can read these research studies and be able to incorporate this evidence into my practice. The last one we had, “The workload requirements make it difficult to use research based practices” was reverse-coded because if someone said, “yes, I strongly agree,” it makes it difficult. Then, they would be less likely to be supportive of this research-based training.

So, for the quantitative analysis, what we did is look at the questions we said earlier, where they fell. So, the higher the percentage, the more they were gung-ho about evidence based (research). We did it at two points in time, as Kathleen said earlier at baseline, which is the first survey we did, it was around 75 percent for the control group. Interestingly the outcome survey, which was done after everything was over, and remember the control group was the group that took the wellness, they were not involved in the modules, they actually went down slightly to around 72 percent. When we looked at the training group—those were the groups that did the modules—at baseline they were around 72 percent and they increased at the outcome at around 76 percent. You can see at the bottom a little star with a P (\**p*). For those of you who don't really want to get into statistics, that's a good thing. It basically means this was not random. What it means is that this was a significant increase over time.

For the next steps for analysis, the good news is that we have a lot of data. We're still in the analysis phase so stay tuned for more results. We're going to be comparing the scores for counselors of supervisors from across the training and the control group. We will be analyzing data from the pre- and post-tests that were done. We had a pre-test about the preemployment transition services; compare that to the post-test to see what was their baseline understanding about these research-based, evidence-based concepts and did that increase, stay the same, or decrease after they took the training module?

We're going to look for correlation between the test performance within the research orientation scale score and we’re going to compare the states’ caseload data across the training and control groups for the period in which the training took place. I think the main point of the slide is stay tuned, there's still a lot more to come. As Kathleen said, we were very deliberate and very purposeful in pulling together the Center and the study and we want to be just as purposeful about the analysis and the dissemination of it.

As Kathleen mentioned earlier, I had the great pleasure of being able to talk to many of the VR counselors who participated in the training, whether it was the preemployment transition services or employment of people with autism. The goal is, because we wanted to do adult learning principles in our training ourselves, and one of the adult learning principles is not to say, “Hey, here you go, here's the training, and we'll never speak again.” We wanted to have these monthly check-in calls that gave people the opportunity to say, “Okay, there's this thing in the training but when I talked about it at work, people had these issues” or “Hey, the training got me thinking about this and I had these questions.”

As Kathleen mentioned earlier, our job was not to answer all of the questions, fortunately. It was to go to our technical working groups and pose to them as the experts to say, “These people in the field, I was talking to a VR counselor and they wanted to know about X, Y, and Z.” So not only did we want the check-in to be able to answer and address these questions as they were coming up in the field but also to be able, in real-time, to see how the training was and wasn’t able to be implemented in their workplaces.

So, in general, I talked to 12 people. The goal was to be able to talk to everybody who was participating in the trainings once a month for about six months. What may resonate with you, turns out people are really busy! Even when it's a ten, 15-minute phone call, sometimes that seems to be too much so I'll talk about that in a little bit but what was fortunate is 12 people really did make an effort and set aside the time to talk. Some people I talked to once, other people I talked to multiple times and they were all very informative in learning how the training was and wasn’t helpful to them.

We started off these conversations initially with a sort of a quantitative focus, like, What was your reaction to the training? In that same sort of 4-point Likert scale we had very positive, positive, negative, and very negative. A hundred percent thought it was positive or very positive so those people who ended up talking to us in the follow-up had a very positive reaction to the training.

Some of the qualitative comments, people really liked that it was self-paced, they could work on it in their own time. If there was something they wanted to take a little more time at, or oh, I'm already familiar with this, I can go through this quicker. That way we were able to, using the adult learning principles build upon the knowledge that the adult brought to the training as opposed to everyone was coming in with the same level of experience and knowledge. So people were really very positive or positive to the overall training, the format—the online self-paced module—and also the summary document, which summarized the evidence-based research that was out there.

One of the comments I received a lot from VR counselors, the ones that I talked to were very, very receptive and eager to learn about research and happy that someone had the time to go through and combine it all and present it to them in a format that was very easy for them to understand and be able to hand out to their staff or talk about in staff meetings, so they were very, very happy about that as well.

Over time, one of the things I asked about (was) what were you able to do after the training? What were you able to put into practice? Those who were involved in the preemployment transition services training, a hundred percent, all of them used the training information with staff. They said, it was very helpful; our state is really very a big proponent of preemployment transition services. It was great to have more information. I shared it with all the staff.

Also, more than half trained staff, so they had actual trainings within their agency on preemployment transition services. They also fortunately did not encounter a lot of resistance. Only about 14 percent said they were sort of met with stern faces and no, we don't have time for this and we don't want to go down that road. Most of the people said people in our agency were really hungry for information and glad people had it and could share it with them. Not many people did additional coachings with staff. Only about 14 percent in the preemployment transition services did additional coaching and I will talk in a little bit on why this may be the case.

I also had the same questions and same conversations with people who took the training module for increasing employment opportunities for people with autism and they used the information with the staff but not as much as the preemployment transition services. They were about split in terms of those who trained staff and didn't train staff. Also split with coaching and not coaching, and while most of them did not encounter resistance, more in the autism group encountered resistance than in the preemployment transition services.

So, what could explain some of this? Well, one of the reasons that may explain some of the differences between the groups is the organizational and the state culture that already existed at these VR agencies. At least the people that I talked with who took the training and that we did these follow-ups with, their agency was already very gung ho and supportive of transition-aged youth so when someone said, hey, I have information about this, they're like “Awesome, great! Come talk.” Where, with the states who did the autism training, there was not necessarily that organizational or structured support saying “Oh, wow we've just been waiting for this opportunity to get more information,” so they encountered more resistance with sharing it.

When we did this intervention we were looking at change at both the individual level and the organizational level. At the individual level, all of the participants, no matter what training they took, said that it positively reinforced previous knowledge or increased their awareness. We were really encouraged by that because it means the research and information that we gathered was speaking to the audience; it resonated with their experience or it was “Oh, I never knew that, I learned something new, this is really going to help me in my job.”

Interestingly, about 75 percent of the participants said that they found the adult learning principles training very useful, and as Kathleen said, we put it that in there because in our organization, we have a lot of resources about adult learning. It was a really interesting finding that the VR counselors I spoke with said actually, that was incredibly helpful because I can take these adult learning principles and then use it to shape our internal trainings so we have better internal trainings now. I can talk about it with our state VR supervisor. We have better state trainings, now. As you know from your own experience, our trainings never stop and there's a big difference between a good training and a bad training so they were very appreciative so it wasn't just putting the VR-focused information into practice but these larger adult learning principles they felt were making a difference in their day-to-day job with their colleagues.

Also, in terms of the individual level, the counselors who took the employment for people with autism really noted that they appreciated the statistics involved because these were research-based trainings and we were summarizing the research findings. Many of them felt that they had sort of anecdotal evidence or personal experiences but it really wasn't backed up by research. They felt that because they had taken this training and had this research and statistics they could go to their supervisor, they could go to their staff with research and statistics and say, hey, here's some, remember that case we were talking about, here's some statistics that kind of back this up.

The people who took the preemployment transition training were more likely in our conversations to talk about the adult learning principles and they focused more on the things they took from that, as opposed to the preemployment transitions. One reason I speculate for that is what I said a few moments ago, is that a lot of these departments already focused on preemployment transition services, it wasn't a new concept. People were already on board so they were able from the trainings to be able to take little bits and pieces or emphasize, but it wasn't sort of a wholesale adoption like, you guys, there's this whole brand new thing you've never heard of before. Where with the adult learning principles to many people, that was brand new, and a real welcome addition to their agency.

You may not be surprised that on the organizational level, it was much harder to change. From my conversations, there tended to be three reasons for that. One reason was that staff turnover was extremely high. So, they had the training, they were really excited about it, they would go back, they would have a training with their staff and talk about it. And then in four months, half those people would have left that job or were doing another job within the agency.

If the goal is to disseminate information to larger and larger groups then if key people in those groups keep leaving, it's very hard to transmit information and therefore change a larger agency.

Another thing that I heard by almost absolutely everybody, was that they spent a lot of their days putting out fires. I remember one conversation with someone who said, “You know what? I would love and my colleagues would love to sit down and have a really heady conversation and based on research and do this really thoughtful evidence-based action; I just don't have the time.” And so, there was not the lack of desire or wanting. It was the actual feeling of I am attending to crises. I don't have the sort of time for the reflective action that I know is best to take, I just don't have time to.

And relatedly, even when people weren't putting out fires, even when things were going really, really well, it turns out VR counselors have a lot of things to do, and really long to-do lists that even at the end of the day, all those things are not checked off. Again, even if people were willing, staff was really willing to learn new information, it is always easier to do things that you have always done. If you are pulled in a lot of different directions, even if things are going well, it can be hard to say let's stop, let's take on something new, let's change speed. So it wasn't a resistance to putting things into practice, it was just simply staying; I don't have the energy, the bandwidth or time to do that.

Despite these challenges, there were some successes that I wanted to share with you briefly. One of the counselors shared that after she attended the preemployment transition training, she was able to go to her VR agency which was already supportive of this but now, backed with this evidence and research, to be able to say, “This is really important and here's some information that could help.” So her VR agency created a new job category called vocation rehabilitation specialists who just work specifically with youth and they were able to add three staff because of that. So that was a real happy success story.

Another, even when there wasn't something as concrete as that that happened, several of the participants said that when they shared information from the training, it really helped to spur dialogue. There was something to talk about, they could exchange information, they could have an idea or practice in front of them and talk about it.

So, it didn't necessarily yield to change the next day, but it was starting these discussions and these discussions sort of filtered up to the state level and filtered out to others. And so, that is, for all of us who are familiar with how change happens, change usually doesn't happen overnight. It happens in these dialogues that begin with a few people and begin with more and then more and so forth. We were very pleased to know that, even with all these competing demands and barriers to implementing, it was having these conversations that could then create longer and more lasting change down the road.

One of the things that we're looking at for future research that kind of grew out of these qualitative conversations is that most of the VR counselors who attended the trainings did not respond to the follow-up requests or I only talked to them once. One of the things that we know about training is that it is better to have this follow-up, to be able to talk to somebody, who can put you in touch with resources or answer questions or be able to troubleshoot as you're implementing things in the field.

What are ways to increase participation? Most participants who did the follow-up identified staff turnover as the major barrier to implementing these best practices so knowing that we aren't going to solve the issue of high staff turnover, how can we develop trainings and follow ups that can take this into account? One thing that was really very striking to me in talking across all of these different states is just how different states are with their history, their culture and their mandates around VR services. There wasn't this sort of one size fits all, okay, what works in Alaska is definitely going to work in Virginia. It wasn't--for a million different reasons.

So, what should, when we put together trainings, how can trainings address this wide diversity without creating 52 different trainings? These are questions that we definitely would love to hear your feedback about later in this presentation or at the roundtable session. But, now I want to pause and sort of open it up for larger questions. But also, things that Kathleen, Amber, talked about, how this resonates with your experience, things that are confusing, you want some clarification about. Kind of want to turn it over to you and see what's on your mind after this presentation and we have our handy dandy mic to be able to do it talk show style.

>> AUDIENCE MEMBER: Hello. One of the slides you had up gave statistics. It was it the one with the P value on it and it looked like in the control group the percentage actually went down. Yeah, from 75 to 72. Whereas in the training group, it went up from 72 to 75. Do you have any explanations for why the control group may have decreased on their score? Any insights on that?

>> MELISSA SCARDAVILLE: (Slide 31) I'll share an answer and you guys can feel free. What I would love to say the answer was, is that the training not only had an additive value, but (was) able to prevent going backwards. When there's no intervention, it's not that things stay the same, they can also revert. So, that can be one explanation, that there is this kind of natural ebb and flow to VR agencies in terms of what the priorities are, what the resources are, and when we caught them at baseline, at outcome, they were dealing with a different set of issues. Where, in the training group, because of this training, they were able to interject in the workplace these information and lessons that they learned in the training that was able to counteract some of those larger organizational and state level changes that are always happening. So, I don't know if you guys…and if other people have ideas, too. Please share, too, that was just one theory that we have.

>> AUDIENCE MEMBER: (Slide 45) In terms of staff turnover, are there, did you find there were exit interviews consistently offered across the states? I mean, what are the protocol similarities and differences in the process there?

>> MELISSA SCARDAVILLE: Sure. Since, the questions I had were more focused on the trainings that we had offered. We didn't sort of systematically ask about exit interviews. It just sort of happened to emerge so I can't say, I can't kind of give a quantitative of how many states did this versus that.

What I can say is that there seems to be a huge variety in terms of how turnover is addressed. And in many places, it was positions being eliminated so it's a difference between whether a position is eliminated as opposed to someone gets another job or wants to leave that current job. They're also, even in a few cases where people left voluntarily, the agency decided not to fill those positions. So, they said, okay, well, Kathleen is gone but Melissa, Amber and Joann, you can pick up that caseload and do the work.

So, in terms of exit interviews, I'm not sure if I have the best answer other than to say that there did not seem to be anything that was systematic across all states and it did seem to matter whether or not that position was going to be filled again and whether or not the person left voluntarily.

>> AUDIENCE MEMBER: So, just as a follow-up, it seems whether the positions are filled or not, the tasks still need to be accomplished and I'm wondering about other ways, the concept of stackable certificates or people to attain knowledge and retain knowledge and move up and advance might be a future plan across the dimension of knowledge translation. That whether, if there are specific tasks and responsibilities assigned, how do we break those out so people have that sense of competency as they're in their onboarding process and once that competency fits in, then the feedback loop, which takes time, but there may be some other options there.

>> MELISSA SCARDAVILLE: Yeah, one of the things I hear you saying, is sort of codifying it in the structure, not the individuals. So, when the individual leaves, yes, they may take their individual knowledge and experience but what their actual tasks are and the drivers of that task and the reasons why you do those tasks, that doesn't leave. So, it's, because most of us have the experience at workplaces where you have the job description and then it kind of evolves over time, like it becomes a mesh between like that person and their experience and what the job calls for. And so, the more that we're able to have these systemized trainings or manuals or explain why we do certain things and not just like, well, Melissa always did it that way, then it becomes embedded in the role, not the person. Yeah, that's a great point.

>> Other questions about the KTER Center in general or the presentation or reactions or solutions to the questions?

>> AUDIENCE MEMBER: I worked in quite a few jobs, several different places. And one of the things that I found that was very helpful is when there's high turnover, that if you had videos showing what the job required and you worked your way through, that with those videos, the person learns, that knowledge base continues. I heard you talk about booklets. I didn't hear you saying anything about videos.

>> MELISSA SCARDAVILLE: It's an interesting point and something I think we can talk further about in the roundtable but that at least what I'm hearing you say is that there are multiple ways to convey or disseminate information and just sort of handing someone a manual or a book, that's not going to work for everybody. Being able to have videos that people can sort of see things in action, it would not only speak better to the learning style of some individuals but for some people, that might capture the nuances of their job better.

So, just in terms of thinking about us in training, like, when we disseminate products, to be able to disseminate them through a wide variety of formats. Which I know we try to do through webinars and so forth, but to be very mindful of the medium in which the information is being put across, not just the information itself.

>> KATHLEEN MURPHY: The other thing, just to address this topic, the second part of the survey, the baseline and outcome survey, does ask people what resources you find useful in doing your job. There isn't a question specifically about video. There is one about digital output as opposed to hard copy, like webcasts, that type of thing. So we will be able to take a look at that and see, the people who are scoring highly on the research orientation score, are they using certain types of resources more often? Are they engaging, that third section is on interactions, who are they talking to more often? Is there some kind of link between that? So, thank you. It's good to know of your interest.