Episode 75: Mary Ellen Dello Stritto

# KL: Katie Linder

# MEDS: Mary Ellen Dello Stritto

# KL: You’re listening to “Research in Action”: episode seventy-five.

# [intro music]

# Segment 1:

# KL: Welcome to “Research in Action,” a weekly podcast where you can hear about topics and issues related to research in higher education from experts across a range of disciplines. I’m your host, Dr. Katie Linder, director of research at Oregon State University Ecampus. Along with every episode, we post show notes with links to resources mentioned in the episode, full transcript, and an instructor guide for incorporating the episode into your courses. Check out the shows website at ecampus.oregonstate.edu/podcast to find all of these resources.

On today’s episode, I am joined by Dr. Mary Ellen Dello Stritto, the assistant director of the Ecampus Research Unit at Oregon State University where she’s involved with the design and implementation of research studies in online and distance education. Mary Ellen manages and oversees statistical analyses for the research unit and also directs the Faculty Fellows program and a professional development program for faculty. She has a background in psychology, with a specialization in quantitative methodologies, survey design, and statistical analysis.

Thanks so much for joining me in the studio today, Mary Ellen.

**MEDS:** I’m happy to be here!

**KL:** So I am super excited to have Mary Ellen on the show because she is one of two people in the Ecampus Research Unit that keep me sane every day as we work on our research, and I wanted to go a little bit behind the scenes and tell those who listen to Research in Action what we do in the research unit and it seemed like a perfect opportunity to bring Mary Ellen into the studio so we could talk a little bit about what a research unit does. So why don’t we start there, Mary Ellen. What is the Ecampus Research Unit? What are some of the things that we do?

**MEDS:** Alright, so the research unit is primarily focused on three things. Uh specifically we are involved with conducting original research on teaching and learning, and specifically distance education. Secondly our research is to support faculty uh particularly here at Oregon State on doing there on research on teaching and learning, uh and particularly in online and hybrid environments. And then third we are focused on seeking funding in order to support the work that we do. In all three of these cases we are focused on increasing research literacy and understanding of what it means to research distance and online education.

**KL:** Awesome. So for really, really long time listeners of the show; people who may have listened all the way back to episode zero when we talked a little bit about the research unit, uh and this would have been like well over a year ago now, we talked about how the research unit is relatively young, and we started it in August 2015 and Mary Ellen came on to the research unit just about six months ago, we’ve been expanding and we added another researcher, and I thought that we can also talk a little bit today about the kinds of research that we do through the research unit, because this is something that I don’t think has really come up on the show before. Um and it’s definitely – basically it’s our full time work. It’s what we do other than the podcast and it might be of interest to our listeners. So what are some of the projects we’ve been working on in terms of um the original research we’re doing in the research unit?

**MEDS:** Um so some of the original research that we’re focused on involves looking particularly at what happens on online courses in terms of how students use closed captioning for example. Uh another project that we’re looking at specifically is what’s happened with our own data here at Ecampus at Oregon State in terms of enrollment, in terms of trends, of credit hours, in number of students enrolling in online classes, um also looking at what do the students at Ecampus look like? How do they change over the last – in some cases 25 years? And so one of the projects that I’m working on specifically is getting a handle on um you know, what did Ecampus look like back in 1997 versus what do Ecampus students look like today? Um and trying to map that data in a way that we can tell a story.

**KL:** So I’d love to talk with you a little bit more about that long term data analysis, because I think that is one of the very cool things about Oregon State Ecampus; is that we have been operating now for almost 20 years, and there are very few places in the United States that have that sort of longitudinal data set. Um and certainly I think our data collection has become more robust over time, like our many other institutional data practices, data collection practices. Um but I would love to know more about how do you even go about tackling something like that? Because that was a big part of your role when you came onto our team, is I just said you know “Please tackle this data monster. Go look and see what’s there and let’s try to figure this out and how we may be able to leverage it in a lot of different ways, both internally and maybe with some publications and things.” So how did you go about just tackling that?

**MEDS:** Yeah that’s a great question. So the first thing you really need to do especially when you step into an area in which you don’t really have any idea of even what the data is, is begin by asking questions, begin by talking to folks who know what that data looks like, and that’s really the most challenging point. And especially here at Ecampus because there has been almost 25 years of data is some cases; is getting the sense of “where is that data, where is it stored, what does it look like, how do you access it that data?” Um and so here at Ecampus I went to our data analyst to get a sense of what are we dealing with? What is the landscape of the data? Um and what can we possibly do with it? Um and then of course wrapped up within all of that is how do we handle the data, issues of data security, who has access to what? So there’s a lot of questions to be asked, and so I approached in terms of trying to really understand that complete landscape, and to really understand what’s the breath of what we have, and then trying to zero in on what is the process by which we sort of narrow it down and decide where do we begin? And so that’s basically where I’ve begun, is to work on some of the more readily available data and some of the data points such as enrollment and student credit hours that our data that is used very heavily as a metric in higher education in any university to be specific. And to begin there to try and get a handle of “what are we dealing with?” and then to go a little bit deeper into things like gender, ethnicity, student status, um you know, international students and things like that to really get a sense of um you know how can we represent what our student populations have looked like over the years?

**KL:** I think this is one of the more exciting projects we’re doing right now, because we do a lot of data analysis here at Ecampus that is kind of short term. Like immediate, just in time, you know, what do we need to know term to term? But we haven’t had the capacity really to go back and look for those trends and really try to tell the story of what’s going on with our students, so this is a really exciting new initiative for us. Um let’s transition to talk about some of our more upcoming projects that we’re also very excited about. Um there are a couple of studies that we’re doing right now, one on instructional designers. Do you want to talk a little bit about that?

**MEDS:** Yes so we just completed the data collection of a study, a national study, of instructional designers, and their research backgrounds, and their engagements specifically in research. And this is a national study of over 300 instructional designers who responded to a 60 item survey, and they put a lot of effort into that, so we’re grateful that they would take the time to do that. They’ve given us some really great information about what kinds of research backgrounds they have, and what kinds of research they’re involved in. So in the process of kind of compiling that data and telling the story of what we learned from those instructional designers. And I think it’s going to be a really great piece to help us understand what their roles are like, but also help us understand how we can further leverage instructional designers as researchers in higher education, and the power that they may have to advance the field.

**KL:** I’m so excited about this study because I feel like one of the things that we do in the research unit is we really look for gaps, or we look for things where maybe we’ve made assumptions, but we don’t have the data to back it up. And that’s really true of the closed captioning study we did where we were trying to figure out how students use and perceive closed captions when they are not using them for disability purposes, and we kind of made a lot of assumptions about who uses closed captions and why. Our study really showed that you know broad use of closed captioning is happening in classrooms and all modalities with students who have a range of kind of demographic identity categories um and its way outside of sort of the narrow identities we thought were using closed captions. So these national studies really give us a really cool opportunity to dig in, and see what’s really going on and then share that out in a really broad way. Um so we have another really exciting project coming up this fall as well with a data base we’re creating, why don’t you tell us a little bit more about that?

**MEDS:** Yes this is another exciting project that we have in the works, um and this is uh an extension of a project in which we were looking to see, what is the research base out there on the effectiveness of online education? So we’re putting together a data base that includes all, as much as we can find that is all, all the research that has been published out there in various disciplines that has done sort of comparisons of online, or hybrid courses, and face to face courses to see what are the comparisons in outcomes in students for the most part.

**KL:** So this data base is something I feel like we get questions about all the time. Like faculty will ask us, or leadership at the university will ask us, “Well what do we know about my discipline?” You know, like there’s still so much skepticism and we can link to a couple of national surveys that show the majority of faculty are still very skeptical about online teaching and learning, and it’s interesting because when I first started at the research unit I had a couple of meeting with people and they said, “Well isn’t it your job to convince me that this works?” and I said “No not at all. I come to this very skeptically as well, and I feel like the job of the research unit is to try to just provide as many resources as we can, and also to conduct the studies to really find out, you know, what do we know in certain disciplines?” And it may be that online education is better in some disciplines than others. You know that’s the kind of thing that we’re trying to figure out. So this database we will certainly be uh sharing it out broadly when it is available and people can go on and search. We are going to take a brief break, when we come back we’ll hear a little bit more from Mary Ellen about coming into a new research role and how she best prepared herself to be successful. Back in a moment.

# Segment 2:

**KL:** Mary Ellen, as we mentioned in segment one you’ve been with the research unit just about six months now and you really came out of a very different area, so I think this is an interesting lesson for our listeners in terms of how you can really move into a new research role, and we’ve definitely talked about this recently um with one of our guest, Tasha, who we’ll link in the show notes as well, about moving into a new research role, um but distance education is a new role for you. So I’m wondering if we can talk briefly about your background. What did you come out of, you’re most recent role, and what that transition has been like.

**MEDS:** Absolutely, yes. So distance education is very new to me, um I often joke around about how even a year ago I didn’t know what an instructional designer was, and I guess there’s a lot of people out there that are like that as well. So my background, specifically, is in Psychology, so I’m a psychologist by training, and I have significant background in research methodology, statistical analysis and research design. Specifically survey design—I’ve had a lot of experience in that. And I also have a background um as a program evaluator in which we use a lot of those research skills. So as a psychologist, and as an individual, I’ve always had a curiosity in terms of you know, online education as a you know trend, and as a kind of growth area in education and I was also a professor for over 16 years, and I have now learned, since I have been here about six months, that I was actually teaching a web enhanced class, my most recent class. So I’ve learned the language of these kinds of things. So I’ve never taught an online class but I did teach using, you know, web enhanced kinds of technologies in my courses, and I’ve always had a curiosity as a professor, as a researcher, as a psychologist and as an academic advisor, uh I’ve had a curiosity about the effectiveness of online classes and the differences between students and how students respond to online education and online hybrid courses. So that’s always been an interest to me. I’ve had situations where I’ve had advisees in my office, some of who really loved online courses and some of which online courses were just not for them, and I’ve always had this curiosity in terms of why? What is the difference there? But also curiosity of how online courses are built and, you know, the pedagogy and the structures around it have always been of interest to me.

**KL:** So one of the things I find interesting about you coming into this position is when we were hiring for this position we were really looking for particular skill sets and particularly around statistics, and long term listeners know that is not my area, I am qualitatively trained, so I was looking for someone who could kind of augment and kind of supplement the skills that I bring to the research unit, and really bring a lot of new skills that would allow us to do some interesting work. And I think that for our listeners out there that are thinking where they want to take their skill sets and different jobs that might be of interest to them, you know this is a situation where Mary Ellen’s curiosity really drew us to her as a candidate, but we weren’t looking necessarily for someone who knew the ins and outs of distance education research, because there aren’t very many people who know that right now. It’s a relatively new field and we were more looking for skills that could be applied. So uh, you’re a perfect fit. I’m so glad you’re here, and I would love to hear a little bit more about how you approached this new role. Coming in as someone who doesn’t know the literature base, and really trying to get a handle on this. What were some of the things that were helpful for you as you approached the new role?

**MEDS:** Yeah that’s a great question. Um one of the things, again going back to my role as an advisor, one of the things I would always tell students in psychology as I was advising psychology students is that the research skills that you gain in the field of psychology can be widely applicable, and I’m a really good case of that; I’ve worked in many different areas, being able to apply those research skills. So um that has been a great approach for me is to always keep that in mind that the area I work in isn’t as important as the tools that I bring to that discipline. And so when I, and I’ve done this before stepping into different disciplines, I stepped into K-12 education a few years ago not really knowing much about that content area, and what I typically do is I approach it from this perspective of I have tools that I can use to um you know apply to these circumstances, but my main focus is to listen, observe and read. Those are probably the three biggest things that you have to do, right? Is you have to figure out um you know, what is this area about, what is the context, what is- what are the main theories, what are the main concepts that you need to keep track of, uh what are the both psychological and physiological components that you need to pay attention to within a particular area? And again I think that’s where my psychology background is useful and also my research background is useful. And so I approached this particular role um just by trying to really read everything I could find, and really take the time to explore things, and when I don’t know what a particular term means, or when I don’t know what a particular concept is I’m asking questions. I’m asking a lot of questions. Um you know, looking things up and taking every opportunity to talk with individuals within different areas of the discipline to see what else I can put together, um being able to sit in on a webinar for example with the instructional designers was really informative to understand the, you know, what is the trend, what are the issues that those individuals are dealing with within the field has been really helpful to me.

**KL:** So I think one of the things you said that is very similar to how I work too is just this idea of mapping things out; trying to figure out what are the relationships between the theories, the terms, the stake holders the data? All these different kinds of areas. And I’m wondering if there have been particularly helpful things for you to explore as you came into this new role, and you came into this new field? Were there particular resources that you turned to that helped you to do some of that mapping?

**MEDS:** Yeah that’s a great point. Um I think probably one of the most useful things so far, and again it hasn’t been very long, um has been all of the list serves and the professional organizations that I know, Katie, you’ve said, “Go sign up for these four organizations and make sure you’re on their list serves and those things” and it’s been wonderful to have the time to – as they come in, um kind of explore them and look at what the discussions are, look at the blog posts, look at the publications that are being produced. Because not only does it give you the content of what’s happening, but it also gives you uh layers of context from other organizations within the field. And so I think that has been, at least in the short run, very, very useful beyond uh actually going and reading the literature that has been published.

**KL:** And we can actually link to some of those organizations and list serves in the show notes for people who might be interested in this particular topic area. Um so my last question about coming into this new research role is now that you’ve had a chance to kind of swim around in it and see what’s there, are there particular areas of research education that you’re really looking forward to diving in to? Whether it’s current projects that we’re working on within the unit, or other things that you think you know in the future we’re really going to put our attention to?

**MEDS:** Mhm, yeah. Um I think, you know, understanding the trends as I mentioned before I think is really interesting. That’s another area that I’m interested in doing more in. Uh I think exploring more in terms of what’s happening with instructional designers is very interesting to me. But also going back to this question of readiness, or what is the difference between students who really function really well in an online environment versus students who do not, I think that’s really interesting. Um and I know there’s some research out there, but I’m interested in exploring what’s been done in that area. I’m also interested particularly having just been to my first teaching and learning conference, or my distance teaching and learning conference, I’m also interested in seeing what’s been done and also cultural questions. So questions of are students from different cultural backgrounds functioning differently in online environments, and are they reacting to online environments differently? I actually went to a presentation that suggested that was the case and that we need to pay attention to the cultural backgrounds of students and how they react for example in discussions, or in video discussions and how students from different backgrounds may react different or may interpret those differently. So I think that’s a growth area. Um that you know, having a limited sense of the field right now, I think that’s an area that needs more research specifically.

**KL:** Yeah I think there are so many growth areas. It’s kind of overwhelming a little bit, I think when we look around at the field and see all the areas we could be researching. But uh I’m excited to see what we do in the future. We’re going to take another brief break, when we come back we’ll talk with Mary Ellen about a new addition that we’re bringing to Research in Action. Back In a moment.

# Segment 3:

**KL:** Mary Ellen, you have brought so much to the research unit already, but I’m so excited to share with the Research in Action listeners one more thing that we’re going to be having you bring to the research unit, and to our broader audience. And that is we are going to start to have some periodic episodes where Mary Ellen is hosting the show, and she’s focusing specifically on issues that are related to stats and quantitative analysis. And again, as our long time listeners know, this is not an area where I have a ton of experience, and I really want to be able to offer that to our audience and to be able to go a little deeper. Now these episodes are still going to be really focused on literacy so we’re not going to get too super granular in ways that people can’t understand, but I think this is something that we can really offer our listeners to broaden the kinds of topics we can talk about. So let me turn it over to you, Mary Ellen, because I know that you have some ideas of the kinds of things that we might talk about in these episodes that are coming up on Research in Action.

**MEDS:** Yeah so I think one important thing for anyone whether you are statistically oriented or not, is to really have a basic understanding of statistics and statistical procedures because that is a big part of research literacy. So for our listeners out there who are interested in, you know, being better at understanding research articles that you read, or being more comfortable may be a better way to put it, being more comfortable with the research out there. So let’s say you’re interested in a particular topic and you want to feel like you understand some of the research in your particular area, that’s where I think we really want to focus. Um and you don’t necessarily have to understand as we said the nitty-gritty of what the statistical analysis does, but having a broad overview, and having an understanding of where these statistical methods are coming from is really, really useful and you can leave it up to the statisticians who actually conduct them. Um but as a kind of professional development piece we all need to be keeping up particularly with what is the latest statistical trend, what is the latest way of understanding data? So along the lines of um literacy, along the lines of research literacy, we’re going to focus I think in the initial episodes on understanding basic things that you may see in a journal article, or that you may see in a book chapter. Um things that you may encounter and not really pay that much attention to. So things like sample size. Sample size is something we could talk a lot about in terms of you know – I get questions all the time as a statistician; what’s the sample size that I need? And people get really frustrated when I don’t have an answer right away. They get a little concerned, “Well why can’t you just tell me what my sample size is?” and sample size is a whole topic we could talk about in terms of you know, what sample size do you need for what particular study, or what particular research set? But also again in terms of literacy um when you’re reading a research study that has a sample size of 20, what does that mean for that particular research study? So we’re going to look at things like sample size, we’re going to look at things like power and effect sizes. For you researchers out there who’ve heard those terms and don’t know how to understand them, now’s probably a good time for us to talk about, what does that mean, um and how do we understand that in simple terms? We can also talk specifically about software packages, and basic statistics, and what are people learning? So for instance, there’s a statistical program called *R*, which is free and open for everyone to use, and it’s becoming really, really popular in the land of quantitative analysis, and then we can potentially get into more sophisticated data analysis techniques if that’s something we’re interested in.

**KL:** Okay so, I’m super excited about this. For my own professional development I’m going to be listening to these episodes, too, and following along. I definitely want to put out a request to our listeners, because we frequently put out request on social media, but I also want to take a moment in this episode to ask if you have guests that you think would be a good fit for Mary Ellen’s episodes where she’s talking about statistics and quantitative literacy, please let us know. You can always email us at raipodcast@oregonstate.edu, you can also connect with us on Twitter @RIA\_podcast. Uh we have a Facebook page as well which I will link to in the show notes, and it’s really helpful for us when our listeners tell us who are the kinds of people that you want to hear on the show, what are the questions you that you have about these areas, uh what are the kinds of topics that you want us to be talking about? But I can say, just sitting here listening to Mary Ellen sharing about some of the things that she thinks would be a good idea here, um, these are all areas that I have encountered and thought, “I don’t really know what that is” and I’m not sure where to go, or who to ask. So, I think these episodes will also have a lot of resources and we’ll be linking in the show notes to all the different kinds of things that get mentioned about where you might go to learn more about these topics, so I think it will be very exciting.

Alright, so, anything else you want to share about these episodes, Mary Ellen?

**MEDS:** Yeah, so I think I’ll add one more piece, based on what Katie just said, particularly that there is, you know we’ve all talked about this thing called “statistical fear”, right? And this, kind of, concern that “I don’t understand this and therefore I’m going to dismiss it and I’m not going to try.” And I think that’s really, um, part of what we can help to change is to say, “yes, this might seem scary or intimidating,” but if you just have a basic level of understanding of why we do statistical analysis, and what we can and cannot say from our statistical analysis, I think that’s very significant. And one of the things that I think, um, everyone needs, whether you’re a researcher or not, is that basic understanding, even for when we read media reports. So, the media has a track record, unfortunately, of taking research results and making statements that really are not the case. And that’s part of the media literacy—broadly, I think—for all folks, beyond the research world, is understanding, you know, when we see a media report that says, um you know, “consuming a particular substance can result in a particular health outcome” that we understand, “well, what exactly was that statistical test?” or “what exactly was that research methodology?” and can we say that, “yes, eating dark chocolate is really good for you in the long run” for example. So I think that there’s a level in which these kinds of discussions can be really useful and very applicable, broadly, in our lives.

**KL:** Well, I can say that I may not want to know that eating dark chocolate is not good for me, but I see your point. And I want to refer our listeners back to our early episode with Neil Salkind where he does talk about “statistics anxiety”. I think that’s a great place to start with this new series that we’re starting on stats and quantitative literacy. So, keep an eye out for these episodes because we’re going to mark them specially on our episode guide, and I’ll link to that in the show notes, and you will get them straight to your podcast-catcher. I do recommend subscribing to the show if you want to make sure that you don’t miss an episode. So, thanks so much, Mary Ellen, for coming into the studio and for agreeing to add this new layer to “Research in Action”. I think it’s going to be really great.

**MEDS:** Thank you for having me and I’m excited to continue on as a podcaster.

**KL:** Awesome. Thanks also to our listeners for joining us for this week’s episode of “Research in Action”. I’m Katie Linder and we’ll be back next week with a new episode.

# Show notes with links to resources mentioned in the episode, a full transcript, and an instructor’s guide for incorporating the episode into your courses, can be found at the show’s website at [ecampus.oregonstate.edu/podcast](http://www.ecampus.oregonstate.edu/podcast).

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