Episode 82: Ronald Kander

# KL: Katie Linder

# RK: Ronald Kander

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

# [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 this episode, I am joined by Dr. Ronald Kander founding director of Kanbar College of Design, Engineering, and Commerce & Associate Provost for Applied Research at Jefferson University. Previously Dr. Kander was the foundering director of the School of Engineering at James Madison University, professor of Materials Science at Virginia Tech University, and senior engineer of Polymer Physics at Dupont. He has a B.S. from Carnegie Mellon and a PHD from the University of Delaware in chemical engineering.

Thanks for much for joining me on the show today Ron.

**RK:** I appreciate it thank you for inviting me

**KL:** So Ron you have had such a strong research career. Including several publications, speaking engagements, leadership positions. And I thought that in this first segment we could take a little research retrospective. You know what have been some of the elements that you think most lead to the success of our research over the course of your career?

**RK:** Um good question. Well, first and foremost I have to say I have been incredibly lucky [*laughs*]. And I define luck very specifically luck to me is opportunity plus preparation. And um I have had a lot of interesting opportunities placed in front of me. I feel like I have tried to remain hyper-prepared. So that as those opportunities swing by I can reach out and grab them quickly before somebody else does, but um a lot of it has to do with that sort of preparation and plan and adapt. I think anybody who tries to say they planned their career is lying to you and themselves when they say that [laughs]. Usually it’s a rough idea and you have to respond to opportunities as they present themselves. So that’s then probably the most strongest thing and I really focus on a very yes and kind of brainstorming, positive thinking, design thinking, pattern matching system thinking kind of approach to problem solving. And what I have noticed if you are willing to be that open-minded brainstromer people invite you to things. They need that opinion they need that person who is going to drop the stupid idea, crazy idea, the out of the box idea to kind of stimulate design thinking. So I try to really focus on that piece of the ideation process and that gets me in a lot of doors. Has gotten me in a lot of doors over time, but what I always tell my students is we focus on the word innovation a lot on our campus and I define innovation very specifically its “ideation plus execution”. The ideation will get you in the door, but the execution is what gets you invited back. Tons of people have cool ideas it’s the people who are willing to follow up roll up their sleeves and execute the ideas that are the ones that end of getting the opportunities. So that’s I think a really, really important piece. Is this creative ideation plus really nuts and bolts execution.

**KL:** I love that idea. But I am hoping you could offer an example when you talk about planning and adapting. Because this is so key to having a career that is healthy, diverse and changing over time. And as we know there are so many especially since we hear this all the time with millennials that they are going to have multiple careers over their lifetimes. I am wondering can you think of an example of when you planned then you had to adapt in your research career.

**RK:** Um in my career in general there is a ton of those [laughs]. I should premise this in saying my career path is the worst to give to a student as an example ever. I applied to one university out of high school, I applied to one graduate school out of ungraduate school, I applied for one job out of graduate school, I applied for one university out of that job. And since then I haven’t applied for a job since. It’s always been these weird situations that I have responded to. A great career example is when I was a faculty member at Virginia Tech. One of my graduate students, one of my P.h.D. students was interested in teaching at James Madison University, which was up the road a few hours from us in Virginia, because his family lived in that area. And that’s where he thought he wanted to settle. So I thought it would be a good idea for me to try and get him up their as often as I could. So that they would see his face and hear him talk so when he wanted to apply to a faculty position they’d know who he was. So I kept getting myself invited up there and I kept bringing him along to give presentations while I was there. Well like most graduate students he finished his Ph.D. and completely changed his mind and moved to California [both laugh] so you know. But what ended up happening was a few years after that when James Madison decided they wanted to consider engineering as a program and start a new engineering school there. They said there was this guy who use to come up from Virginia Tech [laughs]. So they called up and asked me if I would consider coming up and starting the school of engineering there. So it’s a great example of one of these things where it had nothing to do with what I was planning. Um but then all of a sudden this other opportunity presented its self and it was like “okay I guess I need to consider this”. [KL: That’s a great example] And I pivoted. Um and then the same exactly thing happened from Virginia Tech, or from James Madison to Philadelphia University. Because I built the school of engineering there at JMU and we decided to build it with a very heavy design focus. Seven semesters of design in an engineering curriculum. Then we also partnered with the business school so there was business curriculum inside the engineering school. So my wife and I love Harrisonburg and decided we were going build our dream home and retire there someday, and stay there for the rest of our lives. And all of a sudden Stephen Spinelli becomes, president of Philadelphia University and has this image of forming a new college which he calls Design, Engineering & Commerce where you can have design disciplines, engineering disciplines and business disciplines together, studying together. So they started looking around the country and found the program that we had built at JMU and said “Do you want to come up and start a program in Philadelphia?” So again it was okay we thought we were going to stay here, but now it was time to go do that [laughs]. So yeah that just keeps happening.

**KL**: So I am wondering if you can talk a little bit about, as you are you know past your mid-career stage and you’ve had all these different accomplishments. One of the things we often talk with kind of earlier career researchers on this show. And I am curious for folks who are at mid-career or later. How is it that you are keeping your research interests fresh? You know what are the different ways you’re kind of keeping yourself engaged in your research? As you have moved up into these other administrative positions.

**RK:** Well, yeah sure that is a good question. Um one thing is that um once I started into university administration I think it is important that I prototype everything I want my faculty to do. So I teach two courses a year as a dean, even though it is not required in my contract. I have a research project or two going at any given time I have a couple students working with me. But I always do that as a co-PI with other faculty. So I am trying to always prototype and model the behavior for those folks to see. So for example in the new institution we just started there is a new research services group that’s going to process pre-grant awards and help you get grants through the system and all that. So I pulled in two new assistant professors and the three of us wrote a grant this summer and ran it through the system. Mainly because A. I wanted them to see it, but also I need to run something through that system myself before I can sit down and tell any faculty member “This is what it’s like to run a grant through the new system”. I mean it just doesn’t make sense for me to preach it without practicing it. But mainly the way I try to stay engaged is that I always do work with collaborators. I don’t try to do single pi work because to me a university is about collaboration and that collaboration is about developing human capital. At this point in my career the product of my research is the students and the faculty that are doing the work, not the research result. So it’s kind of a meta-process in my opinion at this point my job is to build human capital not to solve a specific research problem. So when I do this transdisciplinary work it lets me apply the things that I do in material science things I do in system dynamics and systems modeling. But I get to apply it to problems that other faculty are bringing it to us where there are their focusing on a research problem, but they have a material science question in it or a system dynamic question in it that I can contribute to. But it lets me also model what I am doing with them. That make sense?

**KL**: It does and I love that shift when you are talking about the meta level. That you kind of shift away from your own individuals research interests and to starting to think a lot more broadly especially now that you have this larger role within your institution. I am wondering what have been some lessons you have learned over the life of your research career. As you have made these shifts, as you have made these pivots.

**RK:** One thing that I think I sort of realized over the last few years is that everything that I do is teaching. It really comes done to teaching and teaching is really sort of has two elements to it. And the first one which is one of my favorite words is allocentrism and it never gets used enough in the English language. Everyone talks about egocentric nobody uses allocentric which is the opposite. Right it is being able to get into someone else’s skin and see the world from their point of view. Teaching is really being able to put yourself in the other person’s position so you understand what they know and don’t know. And then the second half of the job is really precise communication skills that allow you to very articulately say exactly what you need to say, understand or learn or appreciate a new fact. Everything that we do is teaching if you define teaching in that broad sense…right? Understand somebody else’s point of view and then be able to articulate that point of view to others, if you need to. So I think that the thing that is the central thread to all the pieces of my job, over the years. Is that if you can communicative clearly, have empathy, and be allocentric in the way you deal with other humans. Then you pretty much are going to be looked to, to help lead efforts because those are the things that most people want in leaders.

**KL:** Mhh I love that perspective. We are going to take a brief break. When we come back we will hear a little bit more from Ron about research networking. Back in a moment!

[Music plays]

# Segment 2:

**KL:** Ron you have had several appointments to advisory boards, commissions, round tables by the governor the mayor. I am wondering if you can talk a little about how these positions came about.

**RK:** Sure yeah we were talking about a little bit earlier how I kind of see everything as teaching. I think that most of these came about people are looking for folks who are willing to brainstorm, ideate outside the box, and execute on plans the things we talked about earlier. Communicate clearly be empathic know how to comprise, know how to synthize. One of the things that is really strange is that I really love humor, standup comedy and improv and things like that. One thing that I find fascinating and there has been several research articles written on this is that there is a huge link between creative problem solving and improv skills. The same exercises and training that comedians go through are the same skills that make people creative problem solvers. Which I find fasniating is that linkage, the one thing a couple things that humor does. First of all it makes you not take things too seriously which is something we all do way too much it’s like “relax” [laughs]. If we have a problem to solve we will deal with it. It also is really hones your pattern matching skills, because really humor is just all about interesting patterns. From the simplest example if you think about when we were kids and someone said “What’s black and white and red all over?” and we say “What?” and somebody says “A newspaper”. And we all laugh because you know we have patterned black and white as colors. So the word red “R-E-D”, and then all of a sudden we switched your patterned to it’s not “R-E-D, its R-E-A-D”, and we found that funny. We find that funny because it is distance and pattern matching. So I use improv training skills, I have literally brought Second City the improv team from Chicago to campus to train faculty. In some improv training because it really helps with team building and it also helps them become more creative problem solvers. So a lot of this ability to pattern match and brain storm and emphatically match up with team mates. Is the kind of skill set that gets you asked to do a lot of these kinds of committee work, and state and federal kind of commission work.

**KL:** Alright, so I am just going to dig in a little bit further. I can sense that some of our listeners are like “Tell us more”. So I am curious for example is part of how you get involved with this is over these skill sets you talked about which clearly are very important. Is it because of a position title you have it is because you personally know people who work with the governor and the mayor. In terms of the networking logistics of that, what does that look like?

**RK:** It is networking it is networking and bootstrapping the network. I think the more people you meet and the more people you engage with when you meet them and the more people you say yes and to. The further along you get in that network chain to where you get invited to larger and larger activities. So for example some of the governing positions in Virginia came about because the merriest president at JMU had close connections to the state and federal government. Even though he was a maradist president wasn’t the president when I was there, met him at events and he was curious about my plan. So I would go to lunch with him and tell him what I was going to do with the college. Some people might say since he was the maradist president he didn’t have any authority over me or anything like that, to not do that. And to me all that is investment of time. I mean I find people fascinating and sociology fascinating and social science fascinating. So I love to meet people and hear about what they do and why. I think when you do that they remember you and when they need to talk to somebody or bounce an idea off of they will introduce you to someone who will introduce you to someone else. So I am constantly having people come in because I met at a conference and they thought it would be neat for me to meet somebody else so they will send them in to meet me. And I always say “Yeah, sure let’s set up a time to talk”. I think people just don’t take time to do that. Meet with somebody for a half an hour and ninety percent of the time you won’t talk to them again, but ten percent of the time it will lead to something really fascinating.

**KL**: I love that advice. And I think your point about sometimes this is just a twenty to thirty minute phone call or a skype. You know something really small just to kind of see are there connections, that might make sense or do you know similar people sometimes we find out our networks are a lot smaller than we thought. Because everybody kind of knows everybody. But I think that is a really good suggest for people to take those calls. Even if you are not sure what they are going to lead to it can maybe lead to something exciting.

**RK:** Yeah, don’t try to be to strategic and think “Why am I talking to them? What are they get me or give me?” Or what am I going get from talking to them. You got to forget that piece I am a strong believer in karma. If you meet people and talk to them. The ones who need you, want you, will come and find you. Don’t try too hard to only make connections only with the people you think are going to help your career [laughs].

**KL:** I am curious Ron what has been most impactful for you about engaging in research networking over the course of your career? Is it taking these calls is it other kinds of things you found to be most impactful?

**RK**: Personally you mean? [KL: Yeah, in terms of your own experience]. It’s defiantly the humans the people. I am defiantly an anomaly. I didn’t get into research because I wanted to be the world expert at one thing, I am not a basic scientist so I don’t really think about problems from an hypothesis point of view. I am an engineer and I do applied research and the research of integration and applications. So I am more interested in solving somebody’s problem than I am at a basic question. So I have kind of gone at research in a different way than a lot of basic scientist do, so when you are interested in solving somebody’s problem you are by definition are interested in the human. So I start there and then go backwards in solving the problem and if I don’t know it who do I collaborate with to put a research team together that will solve that problem.

**KL:** So one of the things that you have mentioned about being involved in these local community on these different committees and working with round tables or commissions with the govern or mayor. Somehow you are being set apart to people who are outside the academy. I am wondering if you can talk about that for a little bit for researchers who might be just starting out. You know how can they set themselves up as experts to people who may not be in the academy may kind of know this typical signs that we would know within the academy, for people who are outside of it.

**RK:** A lot of that happened with me. Some of the first things I did outside of academy as an expert were um servicing as an expert witness in some legal cases. And one of the things that um I will go back to one of the things that I said earlier, basically what you need to do if you are an expert is be a teacher. I think that experts tend to get caught up in the fact that they are an expert. And the expert in the room is interested in making everyone in the room understand they are the expert rather than solving the problem. So I think the thing to do is simplify the language, be approachable, don’t carry ubris and a person one of the best compliments I get is when somebody says “you don’t act like an engineer”, and I say “Thank you that is very nice I appreciate that!” [Laughs]. Because I think that people have a preconceived notion that academic experts are going to be these stuffy people who want to look down their nose at you, and use complicated language to make you understand they are really smart. And in most cases if you want to solve a problem for somebody you got to get where they are and make them understand in their language what you know about the problem and how you can help solve it for them. So the best thing to do is not carry yourself like you are better than the folks you are trying to help when you are an expert.

**KL:** One of the constant themes that I heard you say Ron that I really appreciate is it really is about focusing outside yourself. You really have to think about what are the problems over people are bringing to you and what is the role you play to solve those problems. But you are really focused on the other person and what is it they need and how you can help them. I mean that seems to be a consistent theme throughout your career.

**RK:** I think that that is the piece that makes it interesting and full filling. I think that you have to figure out what will make you happy in life and honest to god it is too short to not do things that aren’t enjoy able. And to me that piece of the puzzle is the fun part. Where science, technology and engineering intersects with humans. Because um there is a great engineering blessing that says “May all your problems be technical”, because as soon as you get humans involved they get really difficult…right? And to me it has always been fun to deal with the human side of the technical problem and that’s what gives me pleasure. I don’t do it to build the career I do it because that’s what makes me happy. And the point of this is to die happy right?[Laughs] Its not much more complicated than that.

KL: I can absolutely agree with finding the fun in research. That is what we are all about here at research in action. We are going to take a brief break, when we come back we will hear a little bit more from Ron. Back in a moment…

[Music plays]

# Segment 3:

**KL:** Ron I am fascinated at the fact that you are currently at an institution that has just combined two other institutions together to form one. I am interested in learning what that has meant for the research culture of the institution. Now that you have had this combination, so can you talk a little bit about that kind of decision to combine those two and how that came about.

**RK:** Sure sure, absolutely. So you know I work for Jefferson and Jefferson is the combination of Philadelphia University and Thomas Jefferson University. Philadelphia University a professional school that focused on design, engineering, business, architecture, some health science professions. Thomas Jefferson University also in Philadelphia was a medical school and a health sciences school all purely health. Both of us about 3700 students or so, both very financially sound universities but we realized that combined we would be basically a research two university of about five hundred to eight thousand students which would allow us to do many many things that we weren’t able to do individually. Um ironically about a hundred and twenty degree programs between the two institutions, there were only four over laps. So we were completely orthogonal organizations so from the outside it made no sense to combine, but when you think about the combination of having clinical capabilities at a medical school and engineering and industrial design. You all of sudden can talk about medical product design and development and things like that, that we never could have done before. And then you can talk about new business models for health care. I don’t know if you have heard, but some people think we might have problems in your health care system [Both laugh]. Just you know a few people have mentioned that. So you know having a business school where you are focused on business models associated with health care and having the clenetions that can deal with these specifics of health care, in one place it’s kind of neat. So the university has talked about combining. We have both focused on applied and professional careers and we started talking about eighteen months ago and one thing lead to another and it lead to this really interesting combination of two universities into a single new academic institution. So we are looking at research completely differently, we have actually assigned three of us as associate provosts to think about the dimensions of research we want to address. So we have one associate provost for clinical research, one associate provost for problematic basic research and one associate provost for applied research and that’s the role I have. We have been talking about how those three pieces come together and for some of your listeners who have read Ernest Boyers work from the 1990’s, one of his reports “Scholarship reconsidered’ talks about the four basic types of scholar ship that can be done at a university. And those are scholarship of discovery (basic science), the scholarship of integration, scholarship of application and the scholarship of teaching. And if you really think about the scholarship of teaching as I was talking about earlier it is sort of routed in everything we do. All the kinds of research we do and teaching that we do is really developing pedagogy for teaching. So I think we all do that all the time. But if you think about the other three programmatic research is really talking about basic discovery combined with integration. Because programmatic research really focuses on doing this transdisciplinary so one dimension of our research strategy combines discovery and integration. The clinical research is really sort of a blend between discovering and application when clinical scientist work. And then the applied research I am focusing on in our institution is some blend of application and integration. All the mixes of the kinds of research that is being done on campus, and they are kind of blended. Now you have three people who work extremely well together, the three of us get along extremely. Now you can start thinking of trajectories through that space where you can take something happening in programmatic research and combined it with an application area and that leads to a clinical study which now leads to a new discovery of basic science which then comes back into application to develop a new product and a product. So we can now very numbly start moving around in the research spaces. Think about modern society with the flow of information the way it is now, the world is less about what you know and more about what you can do. So by having this blend of research between basic, discovery, application and integration in one place. We can very rapidly transition from knowing a piece of information to that execution piece to applying it and integrating it. Because society now values how fast you can apply information and how fast you can accomplish a task. Because information flows fast enough around the world and that knowing a piece of information alone isn’t enough to give you the advantage. You have to know something and know what do to do with it how to execute on it. So this whole design is around being very nimble and taking basic research results and reducing there practice very rapidly. If you think about like even a basic NSF grant now a days. What are the two basic questions in any NSF proposal? Its “What’s the intellection merit?” and “What’s the boarder impact?” So it’s no longer about what you know it’s about what do you know and what are you going to do with it. So that’s sort of the idea. That make sense?

**KL**: It does and it sounds like you are setting up some amazing collaborations. That’s very exciting and you’ve made it sound very simple and easy to do. But I can imagine that there are a lot of complexities in this process of merging. And I would imagine especially amongst the faculty kind of thinking what does this mean for them and for their research agendas. Have there been any particular challenges you faced kind of working in this new research arena.

**RK:** Yeah sure so um, the challenges are sort of at both ends of the spectrum if you are going to combine the two organizations. You have to have a really cogent strategic plan, some overarching principles, a clear mission that is going to bring the organization together. So you have a touch zone that you can say when I am going to do something does thing match up with what we are trying to accomplish. So I think one of the biggest challenges has been and still is, is getting the faculty and the administration on both campuses of our university to have that discussion to determine what’s our shared vision. Then on the other extreme you have the fact that a lot of the nuts and bolts processes inside of a university. What are the promotion and ten year requirements going to be, what are the contracts going to look like, how does the registrar office operate, how do students get their diplomas, how is finically aid going to work. You know all that sort of operational stuff has to be blended too. So what we really have had to do is work in multiple time scales simultaneously and that’s one of those really one of those unusual skills that leads to a lot of discomfort because you are always dealing with risk and uncertainly. You never know enough about anything before you make the decision because everything is changing real time in this. So it can’t be “Oh what did we do last year?”, well there wasn’t a last year. So managing risk as a dean my biggest goal this year is to look at my faculty and my students and say “Just look at me, I got this. Don’t worry”. Your job are the students the classes, and you know let’s keep all the trains running. Let’s do all our curriculum properly let’s give the students the value that they paid for. If you see all these other shiny objects it’s all the changes don’t worry I have your back I got it covered. And it’s just letting people be comfortable with the risk and its okay we are going to get somethings wrong we are going to fail at some of these things it is not the end of the world. We will fix them try it prototype something if that doesn’t work we will change it. And those have been the biggest challenges getting people to think strategically and tactically at the same time and to simultaneously be comfortable with the risk of this transition.

**KL:** Well I think we are going to start to see more institutional mergers in the future. I think this is something people thinking strategically about in a lot of different ways. Thanks for giving us a peek behind the scenes Ron. It was very interesting to hear about from a research perspective how you are starting to pull these things together.

**RK:** And again I think this comes back to the idea of innovation, ideation and execution. I think a lot of people get the idea to combine, but if you can’t come up with the execution plan to pull it off its going be challenging.

**KL:** I think you are absolutely right. Ron I want to thank you so much for taking the time to come on the show and share your experience this has been really fascinating.

**RK:** It’s been very interesting talking with you.

**KL:** Thanks also to our listeners for listening to this week’s episode of research in action. I am Katie Linder, and we will be back next week with a new episode.

[Music plays]

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**KL:**