

Guests: Dr. Karen Gordes, Dr. MJ Bondy

### **The Impact of Trauma on Learning**

01;00;00:01 - 01;00;30:01

Erin Hagar

Welcome to Moving the Needle. Casual conversations about ways big and small to impact student learning. Brought to you by the Faculty Center for Teaching and Learning at the University of Maryland, Baltimore. I'm Erin Hager. Let's move the needle. Welcome back to Moving the needle. I don't know about you, but it feels like I can't skim the headlines or scroll through the Internet without coming upon something about trauma and its impact on us.

01;00;30:03 - 01;00;55:28

Erin Hagar

There's an awareness of the prevalence of trauma that didn't seem to exist four or five years ago, and that's not even counting the collective trauma experienced during the pandemic or by the systemic injustices we learn about or even worse, experience every day. My guests today are on a mission to help educators understand how the neuroscience of trauma impacts our ability to learn and what we might do to mitigate these impacts.

01;00;56:01 - 01;01;24:29

Erin Hagar

Let me introduce you to them now. Dr. Karen Gordes is a program director and faculty member in the Health Professions Education Program here at UMB, where she is also the chief learning officer for the PA Leadership and Learning Academy. She is a certified physical therapist who researches extensively on topics related to interprofessional education and faculty workforce development. Dr. Mary Jo Bondy is the program director for the new Doctor of Medical Science Degree here at UMB and be a certified P.A..

01;01;25:00 - 01;01;47:20

Erin Hagar

Dr. Bondy has done extensive research and advocacy work on the topics of health care, workforce shortages in Maryland. Her leadership in this area led to the establishment of the Leadership and Learning Academy. Both Karen and MJ are passionate educators. They recently presented a session on Trauma Informed Pedagogy at the LEAP Symposium here at UAB and also nationally at the Teaching Professor Conference.

01;01;47:23 - 01;01;53:10

Erin Hagar

I'm excited to share our conversation with you today. Karen and MJ, welcome to Moving the Needle.

01;01;53:12 - 01;01;55:10

MJ Bondy

So excited to be here. Thanks so much.

01;01;55:11 - 01;01;59:09

Karen Gordes

Thank you, Aaron. We really appreciate this opportunity to talk about such an important topic.

01;01;59:14 - 01;02;14:14

Erin Hagar

Well, let's dive in. So we've been hearing a lot about the impact of trauma on our educational system

at all levels, K-12, higher ed graduate. So I wondered if we could start by defining it. What exactly is trauma?

01;02;14;17 - 01;02;42;12

Karen Gordes

Erin, I think that's such a great point to start with, and I think it's best for us to use the definition that's outlined by the Substance Abuse and Mental Health Services Administration. So they define trauma is an experienced event or a series of events resulting in physical, emotional and or life threatening harm that has lasting effects on a person's mental, physical, social, emotional or spiritual well-being.

01;02;42;14 - 01;02;49;17

Karen Gordes

And I think one key takeaway is that you have to recognize that how someone responds to a traumatic experience is very personal.

01;02;49;21 - 01;02;53;12

Erin Hagar

That's helpful to start there. MJ Anything you'd add to that?

01;02;53;15 - 01;03;23;00

MJ Bondy

I'd just say that one of the things that we've learned from the research is that when an individual experiences trauma, their view of self, other and the world really changes because of that experience. And so I think it's important that we keep that in mind as we consider the events that our students in health professions are most likely to encounter.

01;03;23;02 - 01;03;47;22

MJ Bondy

The educational content that we are going to be delivering. I think that we just have to be really mindful of the experiences that our students bring with them to the classroom or to the clinic and what the experiences that they're going to have in the future and help them to be able to withstand those and process those. So lasting trauma doesn't need to live with them.

01;03;47;24 - 01;04;01;02

Erin Hagar

So I think that's a perfect segue way into my next question, which is why educators need to have trauma on their radar. Why? Why is this something that is of particular relevance to those of us who teach?

01;04;01;04 - 01;04;28;28

Karen Gordes

And that's such a great question. And I think to sum it up, we can say that trauma has a negative impact on learning. And if you indulge me, I'd love to do a little bit of neuroscience here. Not not a lot, but a little bit just to sort of frame trauma as impact on learning. It really has the capacity to impede the creation of neural connections as well as impede the strengthening of existing neural connections which ultimately limits the brain's learning capacity.

01;04;29;01 - 01;05;01;27

Karen Gordes

And we know that trauma has a negative impact on a few kind of key structures in the brain that are associated with learning the amygdala, the hippocampus and the prefrontal cortex in the trauma impacted brain. We have found that learners in this situation that the amygdala becomes overactive

and trauma survivors, they sort of live in a state of low level fear in a very hyper vigilant state, and they perceive non-threatening stimuli as threatening.

01;05;01;29 - 01;05;28;01

Karen Gordes

And the result of this is that there's fewer neural connections in your prefrontal cortex. And your prefrontal cortex is where you carry out cognitive functions, complex reasoning, problem solving. So if the amygdala is preventing your prefrontal cortex from functioning, you're really not in a situation or a stance to learn trauma. Second, really negative impact on the body is that it releases stress hormones.

01;05;28;03 - 01;05;55;04

Karen Gordes

And these stress hormones limit the ability of the hippocampus to generate neurons. And this is the area where you create, store and retrieve memories. So without that area functioning, again, you're really limiting or impeding someone's ability to learn. They hope that you can see that there, that this in a relationship between these key structures and the dysfunction that results in that in a relationship from trauma, ultimately is impeding learning.

01;05;55;07 - 01;06;16;04

Karen Gordes

And I think if you can just take the collective experience that we all had from COVID 19, I think many of you probably felt like time had no meaning. Maybe initially you felt difficulty in concentrating, focusing. At times you might have felt as if you were slower in decision making. And that's because we were all living through a state of fear.

01;06;16;11 - 01;06;43;08

Karen Gordes

In essence, there was this global trauma. So if you take that experience that each of us had during the pandemic, you can see that that living in that hyper vigilant state, that fear state impeded your own learning. So we can take that and extrapolate it to learners that have had trauma in other forms. And we can see that those same impacts happen.

01;06;43;10 - 01;07;01;01

Karen Gordes

They process slower. They have difficulty concentrating. They have difficulty focusing. And I think one of the benefits that came out of the pandemic is that people were more open to recognizing that trauma does impact learning because everybody experienced it simultaneously during the pandemic.

01;07;01;03 - 01;07;27;25

Erin Hagar

It really sounds like trauma can impact the very essence of what it means to learn something, to create new knowledge. So it absolutely sounds like something we all need to have on our radar. But thinking about the students, I wonder if you might be able to give us some concrete examples of ways that trauma might surface for students in an educational context, particularly someone learning about health or human services.

01;07;27;27 - 01;07;29;19

Erin Hagar

What might we see?

01;07;29;21 - 01;08;07;17

MJ Bondy

So I'll take that one, Erin. So kind of building on what Karen said, because of this hyper vigilant state, you may notice I a student who's really having difficulty with attention or that access to higher order skills where they can really understand the the issue at hand and process that or they may have more problems with an interpersonal relationship or self-regulation.

01;08;07;19 - 01;08;38;07

MJ Bondy

We can see that, you know, you might see people presenting with anxiety or depression. You might see them disconnect or disengage because of their prior experience. Hence, you may see it presented, you know, from an attendant standpoint like poor attendance, or that you find them not coming to class or they're when and when they're they're in class, they're having difficulty focusing.

01;08;38;09 - 01;09;13;02

MJ Bondy

Difficulty retaining, you know, very basic content. Certainly, we can see it in an intolerance to the ambiguity that is such a critical part of learning to be a clinician or a human service professional where we're not really working in black and white. We live in the gray. And so there is quite a bit of ambiguity. And there tolerance for that might be really low.

01;09;13;04 - 01;09;35;22

MJ Bondy

So those are some concrete examples or really signs or symptoms that we need to pay attention to that we might see in our learners when they have potentially experienced trauma and it's been on processed that it still is having that triggering effect that Karen described physiologically.

01;09;35;24 - 01;09;59;12

Erin Hagar

Yeah, that's so interesting because so many of the behaviors you just outlined could be easily dismissed as lack of motivation unprepared. And this is just how the millennials are. Generation Z is, you know, like it it seems like it could be very casually dismissed when really the root of it might be something very serious that is getting in the way.

01;09;59;14 - 01;10;25;21

MJ Bondy

I think that's so important to to talk about, Erin, because, you know, it's really easy just to go to judgment. Right? So often we teach, as we were taught and we assume that students probably had the prior experience that we did, but we know that that is not true. We know that this these students, unfortunately, we're learning their ABCs.

01;10;25;24 - 01;10;48;26

MJ Bondy

At the same time, they were learning how to respond to an active shooter. Just think about that for a minute and think about how that does affect how a student is going to process self. Other and and and you know, the world that they live in. Just think about how that is going to affect their learning moving forward.

01;10;49;02 - 01;11;12;28

MJ Bondy

And that that is the reality of many of our students, both K through 12 and you know our undergraduate and graduate students. They've grown up in a different world during a different time

with significant chaos and ambiguity and uncertainty and I think that some of what we're seeing is probably responsive to that.

01;11;13;00 - 01;11;27;14

Erin Hagar

Yeah. So taking this into the framework of actually reaching and teaching these students, what does it mean to teach in a trauma informed way? What would that look like for me?

01;11;27;14 - 01;12;04;10

Karen Gordes

I think teaching in a trauma informed manner, it looks like using a strength based, person centered and solutions focused approach to teaching, which I believe are all critical elements for fostering an effective learning environment. I also see the trauma informed pedagogy is that you're creating an inclusive space where we support learners who've been impacted by trauma. And going back to that original definition of trauma by SAMHSA, Sam says, has also done some great work in developing a framework for how best to engage with individuals who've experienced trauma.

01;12;04;12 - 01;12;38;24

Karen Gordes

And that framework has great application in to higher education and sort of outlines six principles you can use to guide your engagement with learners that have experienced trauma. And it has the educator focusing on creating safety, trustworthiness, transparency, support and connection. Collaborate and mutuality, empowerment, voice and choice. And I'll toss it to MJ if she wants to expand on that, maybe give some examples under some of those six principles from SAMHSA.

01;12;38;26 - 01;13;14;16

MJ Bondy

So thanks, Karen. That's that's perfect. You know, it is really about string space and solution solution orientation as well as learning centric instruction. And I think a perfect example is, particularly for a campus like ours where we have so many health professionals learning physical exam skills and for many, many decades we have had our students serve as practice patients for their colleagues while they're learning their clinical skills.

01;13;14;19 - 01;13;47;19

MJ Bondy

And that involves typically, you know, practicing in a lab, in a lab section, being assigned a peer or serving as an example for a faculty member to demonstrate on you. And what happens in that space is that you are disrobed like a patient would be oftentimes just being given a cover, oftentimes instructed to wear a sports bra if you're a woman.

01;13;47;21 - 01;14;29;22

MJ Bondy

Um, or, you know, a athletic year, maybe a bathing suit. And, you know, there was a study done of medical students that 93% of them said that doing physical exam skills that way and being examined by a peer caused a level of anxiousness and embarrassment. And it was something that was intimidating to them. And so when you think about the research and obviously this was a study of one medical school class, but, you know, I think it's insightful.

01;14;29;24 - 01;15;04;26

MJ Bondy

And you think that this is going on on campus across health professions, nursing, PE, TPA, medicine. If we think about a strength based, person centric and solution oriented approach to that, we could think about maybe talking with our students about what does safety mean to them, what

would it what would it feel like to learn clinical skills in a safe manner and engage them, and co-creating that experience almost like a pedagogical partnership.

01;15;04;29 - 01;15;59;25

MJ Bondy

And then we could talk about, well, we could have we have options that we could offer to you. We could do peer to peer. You could choose your partners rather than having them randomly assigned. We could give you options and learning that you would do this in a lab that potentially we could engage standardized patients for this kind of experience, or we could use high fidelity simulation for this experience and just think about how that gives that empowerment and that voice and choice to the students to show that you are actually working with them, you know, collaborating with them, co-creating with them, understanding where they're coming from and listening to them and giving them choice.

01;15;59;27 - 01;16;37;29

MJ Bondy

The other thing is imagine how impactful that could be if you have in your classroom someone who maybe is transitioning as a transgender individual or may be a victim of domestic intimate partner violence, and for that reason feels very uncomfortable being examined by a peer that they really don't have an existing relationship with yet. So those are just some concrete examples that really translate onto our campus because of the health professions.

01;16;38;02 - 01;16;44;05

MJ Bondy

But, you know, I think that there's probably many more. Karen, any any thoughts there that you'd like to add?

01;16;44;08 - 01;17;28;16

Karen Gordes

I think another like great example and unfortunately, like I wish it wasn't a great example, but you talked earlier about students in the educational space. They learn their ABCs and then they also learn active shooting drills. We've seen an increase in mass shootings and we're in a situation now that by the time our students get to graduate education, they may have experienced more than one mass shooting in their life, educational lifespan and so I think one of the key elements under the support and connection is that we have to really recognize that students experiences inside and outside of the learning space have an impact on learning and that we should, in the educational space, give

01;17;28;16 - 01;17;56;10

Karen Gordes

an opportunity to allow students to debrief and reflect on their experiences, whether that be faculty led or whether you build in support services through campus communities. But we can expect students and we shouldn't expect them to compartmentalize these experiences because we know that in the long term that we're not setting them up for self care and wellness and that it is going to continue to impede their actual learning.

01;17;56;12 - 01;18;33;27

Karen Gordes

And along those lines, I feel that we as an educational institution support the system level, need to create this culture, that self-care is necessary, and we need to embody that and reflect it in our own teaching. So whether we incorporate self-care readings in our courses, potentially talking about the necessity of self-care in your course syllabi, perhaps bringing in experts to deliver content on how to engage in self-care and self-regulation strategies.

01;18;33;29 - 01;18;46;29

Karen Gordes

And I think that behaving in that way as an educator helps to reflect some of those six principles. Again, of building support, connection, delivering person centered education.

01;18;47;01 - 01;19;09;05

Erin Hagar

So, Karen, when you're speaking, it makes me think about the opportunities faculty have. Say when something happens in the in the it's in the news, it's in the broader cultural context. So it sounds like what you're saying is instead of kind of walling that off and saying, you know, I know that this is the big headline right now, but we've got to study X-Y-Z topic today.

01;19;09;11 - 01;19;28;08

Erin Hagar

Maybe taking a moment to acknowledge what's going on and how it might be impacting the people in the room, either just because they feel for, you know, the news and the victims of of what's happening in the world or because it's bringing potentially bringing something up for them that they, too, have experienced.

01;19;28;10 - 01;19;43;02

Karen Gordes

Absolutely. Giving that space for the students to talk about it. One creates a sense of empowerment, but it also it creates relationship building between you and your learners and learners within a particular cohort, creating that space to have that discussion.

01;19;43;04 - 01;20;08;12

Erin Hagar

It makes me think about the the content of what's being taught often. And I'm thinking about, you know, we work at a health and human service focused institution and so we can't remove difficult content. Social work students need to learn about poverty and neglect, and we realize that that might be difficult for some of the students in the room who who may have experienced that.

01;20;08;12 - 01;20;31;23

Erin Hagar

But it is an important part of the foundational training of a social worker. Medical students and nurses need to learn how to treat gun injuries, which again might be upsetting for people in the room. But we can't take that content out. So what can faculty do to take care of their students and be mindful of of this dynamic in these particular kinds of situations?

01;20;31;25 - 01;21;09;03

MJ Bondy

You know, in my experience and I'll ask Karen to chime in here, too, I think that we need to be really transparent about the learning experiences that students may encounter. And when we have a planned like lecture or other type of engagement, maybe it's a simulation. We need to be really transparent with them about why we're doing what we're doing, what the experience is going to be like, what it's going to, how it's going to unfold, how it's been planned.

01;21;09;06 - 01;21;55;16

MJ Bondy

And that may reduce some of that concern and uncertainty for them. It may remove some of the ambiguity so they can see that connection. I think where where we're charged to be explicit about the learning experience and what we hope to accomplish in the learning experience, and then again, engaging the learners in the ability to partner and have some control, maybe some shared power of

decision making, maybe some options related to how they want to show their achievement of the expected outcomes.

01;21;55;18 - 01;22;17;14

MJ Bondy

I think that that is something that that I would be an advocate for, again, seeking their feedback on what it means to feel safe in the classroom for them. What does that look like? What does that feel like? What are some examples where they have felt safe in the past or maybe have felt unsafe so we can avoid those?

01;22;17;16 - 01;22;36;26

MJ Bondy

So it really is about developing a relationship with your students, particularly when you know that you're charged with creating content or, you know, discussing content that actually may be difficult for them to engage with.

01;22;36;29 - 01;23;16;18

Karen Gordes

Thank you. MJ. I feel like you hit on almost all of the Six Principles by SAMHSA in just that one example. I think one thing just to add really minor is that creating, again, that opportunity for students to debrief and reflect after the learning experience and potentially providing them resources on how can they effectively process that educational learning experience and its interaction with their own life experiences so that you're giving them the space to come to a resolution about how they felt about that learner experience Because of their past experiences.

01;23;16;20 - 01;23;33;22

Karen Gordes

And I think bringing it to the forefront is that recognition that students need, that it's okay that you have these feelings. We need to work on how to process those feelings so that you can continue to move on and in essence be trauma resilient.

01;23;33;24 - 01;23;55;07

Erin Hagar

What I appreciate about that, Karen, is that it makes us realize that faculty are aren't operating in a vacuum in these kinds of situations that by providing the the idea that there are other resources on campus, there are other resources available to you to help continue the process of that.

01;23;55;10 - 01;24;21;11

MJ Bondy

Can I can I add something to that, Erin, You know, many of our instructors are preceptors, right in the clinical environment. And I have served as a preceptor for many years and certainly practicing in the emergency room, you know, some of our some of our students have never experienced the loss of an individual in their life and that that would be fortunate.

01;24;21;11 - 01;24;53;24

MJ Bondy

And unfortunately, sometimes that first experience happens while they're in clinical training and providing care to an individual. And it can be emotionally overwhelming to absolutely lose a patient. And so I think that as preceptors, as educators, we really need to acknowledge, as Karen said, we really need to acknowledge that emotional response to them. We need to normalize that emotional response.

01;24;53;24 - 01;25;25;06

MJ Bondy

What we we want to avoid is shutting them down and asking them to just put that feeling and that emotion in a box and stored away and suppress it. Rather, we want to help walk through it with them. There's a significant amount of healing that can happen with that interpersonal connection. As Karen said, debriefing a difficult experience, connecting them to additional services that we have on campus.

01;25;25;06 - 01;25;42;26

MJ Bondy

But what we really do not want to do is have them try to suppress that and just move on to the next patient, because we know that that is not going to serve them well in the long run. That's that in itself is unaddressed trauma.

01;25;42;28 - 01;25;59;09

Erin Hagar

Well, there there is so much to mind here for for our faculty. And I'm wondering where faculty might go or where they could look when they're thinking about exploring a more trauma informed approach.

01;25;59;12 - 01;26;31;17

MJ Bondy

So one resource that we've been talking about, right, is the SAMHSA framework. So there are online resources through the Substance Abuse and Mental Health Service Administration. So that's a perfect start. That's really the anchoring for the framework that we've been talking about. Chiarello and Butler have published a text and they have blogs and published articles on trauma informed pedagogical space to help faculty navigate this space.

01;26;31;19 - 01;26;58;04

MJ Bondy

And certainly that would be a great starting point for someone interested in diving into this topic area. There's a lot of insights that have really come out of COVID and the experience of faculty teaching, you know, and and incorporating some of the principles that we've been talking about into their teaching and their lessons learned. Karen, any any other thoughts?

01;26;58;07 - 01;27;28;16

Karen Gordes

I just wanted to mention that some institutions have actually started to train their own medical students in all these concepts. And so I think that that's another kind of bouncing off point to change the paradigm to a more trauma informed pedagogical approach. So several institutions, again, these are medical schools are training their students on what is trauma, what is the framework that SAMHSA has outlined.

01;27;28;19 - 01;27;54;29

Karen Gordes

They've even talked to students about what are adverse childhood experiences and they've outlined the six principles as a way to educate the learner about trauma and its impact on learning. And so I really look forward to the outcome data affiliated with these institutions that are engaging this because I think, you know, information like knowledge is best. The more we know, the better we can address things.

01;27;54;29 - 01;28;24;00

Karen Gordes

And I think why hide this information from students actively include them in the knowledge that we're learning about trauma informed pedagogy, incorporate them in this as we define and develop new educational experiences. So I think that's just another great like pivoting turning point for us as educators is incorporating students in this understanding of the impact of trauma on learning and the ways to address it.

01;28;24;02 - 01;29;04;12

MJ Bondy

Yeah, I actually really love that. The shift that that I see happening, particularly the shift of of moving beyond what is wrong with you, rather, and then shifting to what happened to you that that has brought us to this point at this time. I think that that that's a paradigm shift, but I think it's part of being person centric in in in our care and really inviting patients to be part of the care planning as we move forward in this this next wave of change in health care.

01;29;04;14 - 01;29;05;10

Karen Gordes

Well.

01;29;05;12 - 01;29;21;07

Erin Hagar

The passion that each of you bring to this important topic is is so clear. And I'm I'm grateful to you both for sharing it with us. I'm wondering what is on the horizon for you? What exciting initiatives might be coming your way? Related to trauma informed pedagogy?

01;29;21;10 - 01;29;22;17

Karen Gordes

Or and I love that question.

01;29;22;24 - 01;29;23;27

Erin Hagar

Because.

01;29;24;00 - 01;29;59;26

Karen Gordes

You gave us a great opportunity to talk about a new venture that MJ and I are on. So we recently received a big Jedi Grant Innovation grant from the University of Maryland, Baltimore. And so we're going to have an opportunity to pilot test providing faculty development training on trauma informed pedagogy across programs. So this will be an inner professional pilot test, and we look to evaluate the impact of this grant and the faculty development training program on faculty, on learners, but also at the institution level.

01;29;59;29 - 01;30;48;05

Karen Gordes

So we're really hoping to have an direction on how to make institutional change. I think MJ highlighted earlier that we are on a campus that has a variety of health profession, communities, medicine, law, social work, nursing and more not leaving anyone out. There's much more. And so I think that being given this grant gives us an opportunity to really employ the strategies that we know from the SAMHSA framework, from the literature on trauma informed pedagogy to our own institution, and see can we really make impactful change and can we use the data from this grant to drive choices and decisions moving forward to provide the best educational experience for our trauma impacted learners?

01;30;48;07 - 01;31;08;23

Karen Gordes

And in that way, providing an inclusive educational experience for our campus? So we're super excited. We look forward to working on it the next year and now maybe you'll have us back in a year. We could talk about the actual grant process, what occurred during the development training and what our outcomes were.

01;31;08;26 - 01;31;10;04

Erin Hagar

We would love that.

01;31;10;06 - 01;31;37;00

MJ Bondy

Really excited about the opportunity to continue to work with Karen on this and others were both very passionate about this and raising awareness about how trauma affects learning and and helping to create a community of practitioners, scholars to to help us change and inform policy moving forward to better serve our students and our community.

01;31;37;03 - 01;31;57;26

Erin Hagar

Well, I can't think of anything more important than than the work that you're doing and its potential impact on our students and ultimately the patients and clients that they'll be serving. So thank you for this important work and we absolutely would love to have you back to hear how that training program went and and where this path is taking you next.

01;31;57;29 - 01;31;59;21

Erin Hagar

Thank you for your time today.

01;31;59;23 - 01;32;03;18

MJ Bondy

Thank you so much. Thank you.

01;32;03;21 - 01;32;18;10

Erin Hagar

Thank you for joining us today. On moving the needle, visit us at [u.Maryland.edu/FCTL](http://u.Maryland.edu/FCTL) to hear additional episodes, leave us feedback or suggest future topics, we'd love to hear from you.