

**Queen's Law Virtual Symposium,
Session 6: What Law Can Learn from Health and Other Disciplines (23 June 2026)**

(Michele Leering, Moderator & technical team) Okay. One more time. Super. Welcome, everyone. We're just going to take a couple of minutes to let everybody in from the waiting room. And we'll probably give it a minute or two, because we've just had a short break since our last session, which actually was a two-hour session. So, we're going to give people a little bit of grace coming back from hopefully having a little bit of lunch. (Technical conversation omitted from this transcript)

2:15 Just welcome everyone, coming back from lunch or joining us for the first time. I'm Michele Leering, and I'm one of the co-organisers of this symposium series, with Professor Sharry Aiken, who's also here today. And I'm just delighted to welcome you into this session that I've been looking forward to for about a year. I think when we first had the idea that we needed to learn more, law needed to learn from health care disciplines and other disciplines about reflective practice. So, I'm absolutely delighted to be moderating this session with you today. And we've got five presentations that will be happening. And the session is an hour and a half. What our plan is, is that the speakers will all be presenting for about 13 minutes or so. And the protocol that we've agreed to for timing, given that this is a virtual event, is that there will be an oral interruption by me, two minutes short of the 13 minutes, to ask people to begin to wind down their presentation.

The order of speakers is as it appears in both the abbreviated and the detailed program that was on the website. I'll only be giving short introductions to each of the speakers, because their abstracts are in the full, detailed program, and they have been on the website for quite some time. So, we are encouraging you to reflect on what you're hearing in this event in a number of different ways, in this session included. One is that we've set up a Padlet bulletin board with some questions that we were curious about, but you can also add your own questions and observations in the Padlet. Yashika just put the link into the chat feature, and you can also feel free to comment in the chat feature about anything that you hear or are curious about, or you feel could add to the discussion in the room. And we also have the Q&A feature, which is already enabled, where we're asking you to put your questions. Name who the presenter is that you're directing it to, and I'll be curating that. And hopefully we'll have time to answer all the questions, or at least most of the questions, in the end.

So, as I've said, it's an absolute delight to moderate this panel. My own understanding of reflective practice has been so enriched by reading about what the health care professionals have been up to now for 30 or more years, and they have a rich, rich literature. It's just stunning to read. And then sometimes I imagine, what would it be like if we had that kind of literature in law? And I realised that one of the differences between our profession, the legal profession to date anyway, and the medical profession and health care professions, is the focus on evidence-based practice, values-based medical education, and also evidence-informed ways of thinking, even about pedagogy. So that's made a huge difference in the area of reflective practice.

And I've been inspired by a Dutch educator who captured in an article something I had already been thinking, and have since thought even more about, and others have too, which is Robert Gans talking about reflection itself being a core competence. I was so glad to see that vocalised in 2009, because it was what I had myself been thinking.

So, reflection and reflective practice are always considered in the larger context of how people learn and construct knowledge. That's very strong in the health care professions. It always seems to me that health care professionals, and I include social work in that, are always thinking about who they are accountable to, and in particular, notions of the social determinants of health, I think, can inform us in law, who care about serving marginalised and made vulnerable communities. And the work on social accountability, first advanced by the World Health Organisation and others, of the health care professions, I think has made a huge difference to their focus, initially on patient-centred care and eventually on people-centred care - a movement that is only recently coming into law, partly as a result of the UN Sustainable Development Goal 16.3 on equal access to justice and the rule of law, and the OECD's work and others on people-centred justice systems. This is new for us, and I'm hoping it's going to begin to take us in the same directions that the health care professions started going 30 - 35 years ago, and hopefully we can do a rapid speed catch up as a result of hearing all the presenters in this session.

So, it is my great pleasure to introduce you to Elizabeth Anne Kinsella, who's going to be presenting on "*Professional Knowledge and the Epistemology of Reflective Practice: Engaging a Continuum of Reflection*." Her

full abstract is in the abstracts tab and on the agenda. She is the Director and a Full Professor of the Institute of Health Sciences Education in the Faculty of Medicine and Health Sciences at McGill University. So, great pleasure to welcome Anne, who's been a mentor to me from the beginning of my own journey. So, take it away, Anne.

8:14 (Anne Kinsella)

Thank you so much, Michele. I really appreciate the warm introduction. My apologies (technical content conversation omitted), I'm learning so much watching this. Thank you so much.

Thank you, Michele. It's a real privilege to be here. And I'm really incredibly impressed with all that you've done with this symposium, as well as all that you and others have done in bringing reflective practice into the legal profession. So, it's really a joy to be here and to see all of this development.

I've been interested in reflective practice since about 1990, when I first read *The Reflective Practitioner* by Donald Schön. And at that time, I was working as an occupational therapist in Northern Ontario and undertaking a master's degree in adult education, and reflective practice became the focus of my master's and then my doctoral degree, and reflective approaches to professional knowledge have underpinned my work since that time.

Michele invited me to share a little bit about my journey with reflective practice, particularly how I have worked with it along the continuum of reflection, and how it's linked to epistemologies of practice. So, this is a little bit of a whirlwind through some of my work and thinking. Okay, so a key point in the work of Donald Schön that is often overlooked is that his work began with a concern about a crisis of knowledge in the professions. And I think that that is a wide concern, not just in the health professions, but certainly, I'm sure, in the legal professions and other professions.

He called for an epistemology of practice. So, he critiqued what he viewed as an overemphasis on technical rationality, or instrumentalist reason. And he called for attention to this kind of an epistemology of practice, the knowledge that develops through ongoing reflection in and on practice. And he considered reflective practice as a dialogue of thinking and doing, through which practitioners become more skillful.

Schön used the metaphor of a swamp to characterise professional practice, suggesting that up to 85% of practice occurs in this messy, indeterminate zone, as compared to what he referred to as the high hard ground of empirically informed knowledge. In the professions, he thought that we needed to pay more attention to the epistemological possibilities that arise from these indeterminate zones. He pointed out that learning in professional life begins when routine ways of thinking and doing are interrupted. And I think this is something we sometimes lose in our approach to reflective practice, is that it often arises through knowledge that develops in this context of disruption, interruption, surprise in practice.

Throughout my work, both in my doctoral work and since this time, I've been working along a continuum of reflection, and examining the philosophical underpinnings of reflective practice. During my doctoral work, I began to think about and theorise reflection as a continuum, and this perspective has guided my interest in epistemologies of practice and professional knowledge across the years. The first two types of reflection in this continuum very much depict and align with the foundational work on reflective practice identified by Donald Schön. And I will speak briefly about each of these and show some very brief examples of the work we've been doing in health professions education in these areas. And the other speakers will go more deeply into thinking about and talking about critical reflection in particular.

So, one of the areas of reflection, when we think about reflective practice, we think about this intentional cognitive kind of reflection. And this kind of perspective is rooted deeply in the original work of John Dewey, who was a famous philosopher of education. And it's characterised by this quote: "active, persistent and careful consideration of any belief or supposed form of knowledge in light of the grounds that support it, and the further conclusion to which it tends." And we can see a lot of reflective practice work oriented around this, around developing competencies, around professional development, around reflecting on my practice, really reflecting on what went wrong and what went well.

Another form of reflection that I think is very deeply shown in the work of Donald Schön might be thought of as embodied reflection. This idea that knowing is often revealed in doing. And Schön built on the work of Gilbert Ryle, and also Michael Polanyi, the philosophers, to talk about this kind of what he called knowing-in- action. And an example of this, from a quote from Ryle, that shows what this might mean. This statement: "The mind is its own place, as theorists might construe it, is not true, for the mind is not even a metaphorical place. On the contrary, the chessboard, the platform, the scholar's desk, the judge's bench, the studio and the football field are among its places."

I think there has been a lot that has been developed in terms of embodied cognition, people thinking about embodied knowledge over recent years. It has become a whole field of inquiry in its own right. And I've been involved in some of that as it relates to professional development and professional knowledge. Some colleagues, Stephen Loftus and I, edited a book on embodiment and professional education. People are writing about it in different ways, as it relates to clinical reasoning, as it relates to professional practice, learning and education, and then also as it relates more to the phenomenological ideas of Merleau-Ponty and the body, the body in practice. One of my doctoral students, Helen, interrogated it in the context of nursing, thinking about embodiment, intersubjectivity, and corporeality as it relates to the practice of nursing. Another student looked at the embodied nature of occupation at end of life. So, looking at occupation, and all that we do, through the lens of the body.

The other speakers are going to speak about critical reflection, so I won't speak about it too much. But critical reflection might be thought of - an assumption that underpins it is - that experience is shaped by material structures and sociocultural conditions. And you might ask questions about what structural forces shape the situation, what inequities are present, what futures ought to be possible. And critical reflection is often linked to justice, and the idea of bringing injustice into view. Niki, who will be speaking in a few minutes, has been using critical reflection in her doctoral work. Stella, who will be speaking in a few minutes, has become an expert in critical reflection and has done a lot of writing in this area.

These are a few of the projects that I've been involved in in health care, where people have used critical reflection as a theoretical perspective to ground some of the different kinds of work related to asking questions about professional knowledge, or interrogating or examining assumptions about the way that we do things or bringing different forms of oppression into view.

Critical reflexivity. There are a lot of different ways of thinking about critical reflexivity, and I know that that's something that Stella has worked a great deal with. I really like the work of a philosopher by the name of Barry Sandywell, and he talks about how critical reflexivity interrogates the social, industrial, discursive conditions under which constructions of the world are generated. I don't have my correct slides here, so bear with me. But he talks about critical reflexivity as an interrogation of the ways in which we interpret phenomena.

Some of the ways in which we've used critical reflexivity in health care have been to think about approaches to decolonising methodologies and qualitative research, thinking about epistemic injustice in mental health care practice, thinking about epistemic injustice in health care professional practice, thinking about overcoming ageism in gerontology practice, and also examining the ways in which service user knowledge is used in health care professional practice.

Another piece along this continuum might be thought of as receptive reflection. And with receptive reflection comes a whole realm of potential approaches to knowledge. The receptive stance holds back discriminatory analytical thinking in favour of a more contemplative process, in which the mind acts more like a receptor. Receiving ideas, images, and feelings, and being moved by them, is one way that Willis describes it. There's been a lot of work on presence, mindfulness and contemplation, and I know that Michele has done some work on *presence* as well. So that is a potential whole area, again, of reflective inquiry. I've done some work in this area, particularly related to mindfulness in health professions education and health professions practice.

And then, I guess the journey with reflective practice has taken me into a space of thinking about some of the ethical issues that arise when we begin to engage in reflection. And Donald Schön didn't focus particularly on that in his original work. But it's an area, I think, that the field has moved into more explicitly. So, thinking about ethics and morality as it relates to reflection, and going back to Aristotle's intellectual virtues, he distinguished between

episteme, *techne* and *phronesis*. And the idea of *phronesis* is that reflection supports judgement, interpretation, and wise action in situations where protocols alone cannot tell us what to do.

So, this, I think, has been an area of inquiry that has really grown in recent years in the health professions. We've been working with a team that is looking at clinical *phronesis* in medicine. Another group that was looking at perspectives on *phronesis* in nursing practice. And another team that was looking at *phronesis* in physiotherapy practice. So, thinking about, how does our conception of professional knowledge change if we take *phronesis*, or practical wisdom, seriously as an organising framework? And then thinking about four possibilities of reflection for cultivating professional knowledge.

So, there are very practical approaches grounded in some of the early work in reflective practice. We can see an epistemological stance. We can see reflective practice as an epistemology of practice, recognising that knowledge arises through reflection in and on practice. We can see it as a critical stance, as a way to interrogate power structures and inequities, and as a way to work towards justice. And we can also see reflection as informing a moral stance, of cultivating judgement, responsibility and wisdom in professional practice.

Stella and I worked on a paper, and Stella will be speaking shortly, on reclaiming a theoretical orientation to reflection in medical education research, a critical narrative review, where we really discuss the way in which reflective practice had been taken up in a very instrumentalist way in medical education in the early days, and calling for more recognition of some of those early thoughts around an epistemological stance that questions professional knowledge, as well as a critical stance.

So, just inviting a dialogue. What forms of reflection are privileged, neglected, or needed in the legal profession? How does reflection shape knowledge in the legal profession? And we've been thinking about that quite a bit in the health professions.

And then just a thank you to Michele for the invitation to be here today. And many of these examples are from working with graduate trainees, colleagues, friends and family, research participants, mentors, the Institute of Health Sciences Education, and funding from the Social Sciences and Humanities Research Council. Thank you.

(Michele Leering) Thank you so much, Anne. And I echo the comments. I think my colleague Annie has just put somewhere, I think probably in the chat feature. Hi, Annie. Thank you. What a rich, rich presentation. So, thank you so much for that.

Now we're going to ask Niki to join us, and she's going to be talking about critical reflection in learning about homelessness in health professions education: insights into vulnerability, institutional fragmentation and structural inequities.

Niki is a doctoral student in health sciences education at the Institute of Health Sciences Education at McGill University. So, I'm really looking forward to hearing this, as I'm sure, I can see some of my social justice colleagues on this Zoom meeting, and they are going to be fascinated by this research. So, thank you for bringing this to our attention.

25:00 (Niki Soilis)

Thank you, Michele, and to the organising committee for having me today. I just want to confirm the slides are viewing properly. Perfect. And I also want to thank Anne Kinsella, who is not only my supervisor, but a mentor, and I consider a friend, in helping me think through this work.

I came into the program with a lot of professional experience and a lot of interest and passion for social justice but didn't necessarily know how to approach it. And the orientation of my work is an applied example of one phase of my doctoral research, where we looked specifically at critical reflection and learning about homelessness in the health professions. So, as I go through it, I just want to take a quick moment to acknowledge that while Anne and I are here today, there are a few other members that make this work possible. And it's starting from a place of profound worry and complexity for the phenomenon of homelessness that we're seeing in Canada, pervasive and growing across the country. Large cities are impacted, spreading through the country a lot since the pandemic. And

it's something that intersects and requires coordination across many sectors. So, it's not just in health systems, but it is in social policy. It's in housing. It's even in the justice system. So, it will require all of us working together in the frames that we come with.

But in health systems in particular, the place where I sit, it's something that is actually not very much represented in our curriculum, despite the fact that people who experience homelessness have elevated hospitalisation rates, longer hospital stays, nearly double the cost of care compared to the national average, and also encounter well-documented, pervasive stigma within health systems. So, it is a high priority area.

At the same time, in terms of the rationale for this type of research, we're seeing a good amount of literature that supports that community-based service learning is an approach for advancing social justice and equity, because it brings people closer to the lived realities and allows them to sit in spaces where they can be disconnected from what's going on in their community.

Despite all the rapid connections between health care and social issues, the majority of our training happens in hospital-based settings, so learners end up graduating with not much exposure to the real complexities of the social and structural determinants of health. And despite the fact that some programs do place them in community-based settings, we don't necessarily know how we're fostering that critical reflection on the realities of homelessness and its potential to cultivate equity-oriented practice.

So, with this rationale, we built a research program that actually has two overarching questions. What are the experiences of students' critically reflective learning through an educational intervention involving a nine-week placement in a homeless shelter, and reflective writing about critical incidents during community-based service learning? And from this experience, what critically reflective insights do they gain on systemic barriers, assumptions, and its potential for transformative learning?

So, in terms of the theoretical perspectives, Anne did a great job in giving a high-level summary of critical reflection. I'll just build on that a little bit further, leaning into Brookfield's work, where it's essentially looking at analysing and challenging taken for granted assumptions and actions, and examining the personal, interpersonal, and systemic influences on shaping one's thinking. And we also use the complementary lens of transformative learning theory that was initially conceptualised by Jack Mezirow but has since really evolved into what is now called a meta-theory.

And there is a branch that looks specifically at this theory in relation to social justice, as a way of critically examining assumptions and beliefs, values and feelings, as a way of critical reflection, and the important distinction on self and society in relation to privilege, and to act for social justice.

So, in terms of the design, we have a methodology that was a critical qualitative collective case study. The context of the case was master's level nursing students that were enrolled in a community health course. So in this course, it's a mandatory course that all students would go through, and they would be placed in community-based settings for an extended period of time. So, I want to highlight that it is mandatory and it's longitudinal. And in this context, we had ten students that went in to provide service two days a week for nine weeks in three shelters that are considered for chronically homeless individuals.

In terms of methods, they had two written critical incident reflections that were submitted online. And in these written exercises, they wrote about things that either were unsettling, destabilised them, or things that went well and they wanted to highlight. So, we had those two points of view that were gathered. At the end of the placement, they had semi-structured interviews, and we did a thematic analysis to identify patterns and themes across participants' accounts, looking for how students engaged in critical reflection.

So, four themes emerged through this research, and I'm going to share a high-level overview and then provide a short sound clip, just because I think qualitative data sometimes gets lost if you don't hear the nuance. So, in the first theme, shifting the gaze towards social and structural inequities, participants were talking about the interpersonal roots of inequity, mentioning the fact that despite people needing to seek health care, most were resistant, that eight out of ten times they knew it was going to be a bad experience. One participant I counted spoke about how one shelter user had a suit just to be able to go to medical appointments, and the limited belongings that they had. At the

same time, they were also highlighting structural barriers. So, Quebec being also a language of French and English, language barriers, transportation issues, and also within shelter policies themselves, some of which were not considered wet shelters that allowed consumption, despite the fact that this is a population that had a higher amount of addiction rates. Accessing appointments can be more challenging, but it is doable. But, for example, even if you access an appointment, you get the client the right card, you get the client an appointment, but the only appointment you can get for them is late enough in the afternoon that it means that the client doesn't get a bed if they go to the appointment. If they leave the shelter, they go to the appointment, and they can't get back home in time by curfew, which means that they don't get a bed that night, that kind of thing. There's always something, like, you can get three steps forward and then you take one big step back, because then the client's unwilling to sacrifice their bed in order to go to an appointment that's far away.

So, Michele, can you confirm that you can hear this? Right. Yes. Perfect. Okay. So, the next theme dealt with adapting approaches to care, and it goes in the context of the vulnerability that they were in. So, it goes without saying, and this was referenced by the participants, that they confronted things that they would have never seen in hospital-based settings: emotional, ethical and moral complexities of care. But the positive that they were talking about is also that they were adapting to the approaches that were in front of them. They were going with the people's goals and priorities and the everyday realities, that they didn't have fully sterile spaces. So, they did wound care with what they had to work with. And they adopted, naturally, approaches to care that were more oriented towards harm reduction in general.

“Like, I think the experience reinforced how difficult it is to work in this type of setting emotionally. Also, just on a shift-to-shift basis. Like, you feel like you're almost making progress. I learned, I guess, that you feel like, it's really true, like when you feel like you're making progress with a certain client or something, the next day they could literally just be, they could be not at the shelter, they might not want to be, they could be at a different one.”

So, despite the difficulty. Another thing that came out is this cultivating compassion and a humanised approach to care. So, they were talking about these. One quote was a story of injustice. An appreciation of life trajectories and personal stories, starting to get to know people and understand all the things that occurred in time, as opposed to just seeing somebody at one point in time. And they also talked about building relationships of trust. So, it did approach and inform the way that they saw clinical care.

“You really need to build rapport with them. You really need to create a good relationship with them, a trusting relationship. They need to know that you're there to help them and not harm them. A lot of my patients had past traumas and issues with abandonment. So, it becomes so obvious to them when you're there for them and when you're not there for them. And they can pick up on that really easily. So, you need to really be cognisant of that. Like, what are your own values, and why are you there, and that sort of thing.”

And the last theme was really related to recognising how fragmented systems are, and the service misalignment in these types of settings. So, some of it was brought on by just being in a different environment, in a community-based setting. So, they naturally took on roles of coordination, navigation, advocacy, things like renewing health care cards, getting appointments. Things that they wouldn't necessarily have known or have done in other settings, and a lot of advocacy in accompanying people to medical appointments.

The other piece, though, was actually being outside of the publicly-funded health care system. There were things that they couldn't do that normally they would be able to do. So, things like accessing an electronic health record, or ordering diagnostics, or prescribing medications. These are things that in other environments they would normally have been able to do with an interprofessional team, that in this context they were not allowed to do.

“I think I found it tough being, like, providing care but only up to a certain level. It feels almost bad placing us here to do kind of half the work, where I felt like if things were better organised and we could, let's say, give Tylenol or give Polysporin for wounds, like, fully help them, I feel like it would have had a bigger impact. So, I felt, in terms of, like, morally challenging, just, like, walking away and being like, I feel like I did half my job.”

So, in terms of implications that are broader than just in our space in health professions education, critical reflection offers promising, revealing unique insights into systems, policies, institutional practices and boundaries that shape experiences and continuity of care, and even exclusion.

The piece that is somewhat interesting is that the critically reflective learning is also triggered to some extent by the social context. So, there are places where it actually could help it, and other places where that learning can be hindered. So, in this context, students were showing new competencies that would have necessarily been difficult to acquire, maybe, in other settings, things like coordination, navigation and access, but also being in an environment where they couldn't do the things that they were normally doing. The learning environment was contributing to this fragmentation. So, these are things that, in terms of how we design programs, we have to be cognisant of the fact that we are trying to serve a population, that this population is receptive to having service, but that sometimes the services we design are not necessarily thinking about the broader picture of the learning and the learning environment that we're creating.

So future research needs to examine how these experiences could be structured to support the learning and the benefits for the learners, but also for the people that are receiving services and the people that are working within the broader shelter-based sector.

So, I'll end. Yeah. So, I just want to thank a lot of people that make this work possible, and in particular all of you for listening.

(Michele Leering) Super. Thanks so much, Niki. That is such, yeah, interesting. You'll see the comment there too, from Gemma. So much overlap with clinic law practice. It's interesting to see that. And I think from some email exchanges we've had, there are law students involved in the homeless shelter too. Am I right about that, Niki?

(Niki) I think there may be some that provide service. I just don't know enough about it to be.

(Michele Leering) No, but it's interesting. It was an example of a health justice partnership work when we discussed it before. But so, just again, some other interesting possibilities there about the intersection between the disciplines. And so important to see that research taking place, and this being studied as an aspect of the critically reflective practice of people in health care education. So, thank you for sharing that.

I do want to remind people of a couple of things. Number one, if you do have questions of our presenters, please do think about putting them in the Q&A. Someone's also asked, mentioning that they've missed some of the other sessions. Recordings are going to be available on the website eventually, so that's important for everyone to know. Don't be concerned about that.

We're going to move over now to Corey's presentation, "*Modelling Reflective Practice: Pedagogical Opportunities in Natural Spaces of Encounter*." And as for the other presenters, only a very brief description. But I do want to sneak in that one of the first ways I learned about Corey was that she did a PhD dissertation that turned into a book in 2009, *Negotiating Justice: Progressive Lawyering, Low-Income Clients, and the Quest for Social Change*, which I'm sure, again, a number of us may have seen, who are involved with this kind of work in legal education. She is the Daniel Thursz Distinguished Professor of Social Justice at the University of Maryland School of Social Work. She's also a lawyer. Welcome, Corey.

39:44 (Corey Shdaimah)

Thank you. Can you see my screen now? Is this okay? Right view. Okay. Thank you so much. And thank you for finding my dissertation. That did not turn into a book, but I turned it into a book. It was a lot of labour. And it was really, I'm really grateful to you for that, because it resurfaced, I think, a lot of questions that I was grappling with then, and it gave me some new ideas. And what I'll be sharing here today, I think, is a little bit about, there are similarities, but I think we're in a different place than we were, and so the challenges are a little bit different. So, thank you so much for inviting me to be here. And I'm really grateful for the opportunity to be dialoguing with people who are really committed to educating future professionals, whoever they might be. And thanks to my fellow presenters also, for providing really excellent scaffolding as well.

So, I'm going to give a little bit of my own background, because of course, if we are in a conference on reflective practice, we should be doing a little bit of positionality, I thought. So, you'll know why and how I'm looking at the

things that I'm doing, and a little bit of the context of how I view. I'm going to be talking mostly about professional ethics, because that's the context in which I'm looking at reflective practice. So, this is really on the fringes, and the way it's connected, how it's used. I'm going to provide some empirical examples from my own studies and then look a little bit at what I think the challenges are that these empirical examples show, in terms of what might impede reflective practice in this moment right now. And then I want to suggest, if I can get there on the timing, natural spaces of encounter as something I've been playing with as an idea that might be helpful.

So first of all, who am I? Michele, you've shared a little bit about this. I was a practising lawyer, but many years ago. The last time I practised law was 1992. So, this is a while ago, but my own struggles with what it means to be a lawyer, or what it means to serve clients, and the client professional relationship, really led me to my PhD program, where Donald Schön and the work on reflective practitioners was very key for me in that place. So, thank you, Anne, for that fertile groundwork as well. And I have been for over 20 years a social work educator as well. So, my work is all situated in this practice space, and most of my work examines how professionals, and the people who they either are helping or supervising or controlling, how they work in and around policies that are ineffective and unjust.

And so, I really am looking at how these professionals, whoever they are, whether they're social workers, lawyers, judges, probation officers, are understanding their own roles. And so that's the context in which my empirical work is. And much of this takes place in legal systems. Specifically, I study problem solving courts. And I also study a child welfare court. So, when people's children are removed from their home, these are the courts that oversee the child welfare process.

And I think many of us who are educators of professionals, and who are just human beings living in the current moment, whatever country we're living in, are experiencing a lot of questions about how we live and work together, and how we create societies that are inclusive and fair and kind. And so, I think this ties into the kind of work that I'm looking at, and so is relevant generally to all of us as humans. So, my overarching questions here, again, are how these professionals navigate policies that are ineffective or unjust. And often they do so in collaboration with the people that they are supposed to, or trying to, serve. And lawyers do this as well, whatever kind of practice lawyers are doing. And here, as educators, we're also trying to understand, I assume we're doing this, all of us together, that's what we're doing here, is how can we learn from practitioners? And I think this is really, I think, all of our professions, the health professions and, you know, social work acts in the health arena, but acts in every other arena we can imagine as well. Legislative, homelessness, wherever you would put social work.

But really, how can we as educators of future professionals learn from existing professionals, whether they are former students or other people, in order to help create professionals who are able to reflect and able to engage in ethical practice with integrity? So, it's really interesting for me to be hearing your introduction, Michele, also, because my own work, as you noted, grew out of trying to understand the work of legal services lawyers specifically. And so, I think there's a huge literature really from, I would say, the '80s and the '90s, and I can roll out a bunch of names, people that were influential to me that I was reading. Lani Guinier, Lucie White, Gary Bellow, who talked a lot about thinking about how empirical evidence should inform our work, Gerald López and Derrick Bell, Stephen Ellmann. So, there's a huge rich literature, and they didn't necessarily call what they were doing reflective practice, but all of their work was actually a critical reflection on what does it mean to lawyer, right? And I think that that could be applied. And I think it's worth going back and looking at what they were writing, because really, to me, that is reflective practice.

And I think that the challenges of those times were different than the challenges of these times. But I think the main things that we might want to think about here, that have even been raised, is, professional expertise is prioritised over lived experience. I would say also, and this is interesting, because I'm listening to my fellow presenters, like Niki, when I was listening to you, and I'm thinking, well, all of our education, legal education, medical education, nursing education, social work education, has a huge component. We say it's very important that we learn by doing, right, that we have clinical or practical experiences. However, in the academy, most of the people teaching those are not at the top of the professional hierarchies. So, we don't say, or we don't do, what they say, what they do. So, I'd also say that academic expertise is also prioritised over professional expertise. We have exclusion of marginalised people's perspectives.

Some of the critical reflections also talked about our own complicity in shoring up oppressive systems. In social work, for example, we are required by our code of ethics to be engaged in anti-oppressive practice. So, this is not a question or an option. And in legal education, some of these critiques talked about law centric, like, particularly, court challenges are the be all and end all, without sort of thinking about what are some of the other means that people use to make change. And so those were some of the critiques that I would say probably continue today.

So, for me, really what they were asking, and I would say this question we can ask of social workers or nurses, I was really moved to hear the participants in Niki's study, right, these are the same kind of issues that I hear. Is it possible to practise law, or any other profession, with integrity within systems that are not necessarily designed for the vision or goals or values that we seek to pursue, whatever those are? So here I'm not necessarily saying they should be liberal; they should be conservative. But whatever it is, if we're trying to do something within systems that are not designed to do those things, is this possible?

And how do we answer ourselves as educators? How do we prepare people to engage in practice with that question kind of hanging over our heads?

Okay. I'm going to skip this, because that was just a summative slide, and I want to talk about ethical practice.

So, I study a lot and write about ethics in social work practice. And so, it's all based on - if you're not aware that there's an ethical concern, really there's not much to do, right? So, there are many formulas for identifying and navigating ethical concerns. I don't want to say dilemmas, sometimes they are dilemmas, sometimes they're not, in terms of, there might be a resolution. But we have to see the concerns. We have to identify the values at stake. We have to clarify and weigh the options and the outcomes of the different options. Then we make a decision, including not making a decision, which is also a decision. And hopefully most of them also include some sort of post-hoc assessment. So, without going too deeply, because the groundwork has been laid theoretically, each one of these steps cannot be taken without some kind of reflection, whether it's cognitive or emotional or professional. It's all predicated on that.

And so, when I think about reflective practice, for me it is about this phronetic question, right, as a basis for right action. So, I've totally lost track of time, but I'm going to keep going, and I'm sorry if I'm talking quickly.

I want to provide some quotes from two different studies, and I'm happy to share information on the studies if people want to. But one of them is from Project Dawn Court, which is a prostitution diversion program in the United States. Prostitution is criminalised in almost every state. It's regulated at the state level. So, this is a diversion program designed for people who are arrested for street-based sex work. And I did interviews with both people participating in the program, as well as all the different professionals engaged with the program. I'm going to share two quotes from there, actually. One from a psychologist who runs a program, another from a prosecutor. And then another project that I did on ethics in social work practice, that's interviews with masters of social work level social workers in a very wide variety of practice settings. And I'm going to use some to illustrate three different kinds of concerns. And I unfortunately do not have the ability to share the vocal, which is very moving.

So, this is from Daniel, and these are all pseudonyms, by the way, that they provided. He is a psychologist by training. So that's his ethical background. And he is an executive director of a trauma service program that provides mandated services. So, these are people who are court mandated. And this is what he's talking about. And he says, in psychology, you want your allegiance to be to your client. But the very nature of court mandated programs, you have a dual role, where you have a relationship with the court. And he asks Bell - Bell is the social worker. So, he's the executive director, she's the line level social worker. And he asks her, how does she manage this? And she says, I give very minimal and very general updates to the court. And then he comes back and he says, I think that's an ongoing challenge. And I wonder, in some instances, if that relationship with the court, if that trusting relationship is never formed, which I think most people say is a necessary component of the therapeutic process. But, again, what is the alternative? So, from this quote, I want you to think about, what's the alternative? So, he has a professional practice conflict, right? And he's trying to mitigate this harm. So, he's not operating in a perfect world where he's weighing optimal trauma treatment versus suboptimal. He's weighing no treatment at all versus suboptimal treatment. And so that's important to understand. He is also the executive director. So, more on this if people want to know, in terms of, for him to keep his door open, he has to work with court-mandated programs. So, he's also

weighing - do I work with a compromised system in order to keep my doors open for the entire community that I'm serving? Okay. Agency survival.

Wow. Okay. I will maybe skip this one, and maybe just go straight to the slide. I'm happy to share these.

So here the prosecutor talks about, she's in a role as a prosecutor, but people think she's being too nice as a prosecutor, because she has a particular role. And she basically says, I thought that was the whole point of this program. We're a team, and we're supposed to be diversion and different. And so, people still find themselves embedded in systems and roles where they are supposed to play a specific part, and that also can impede their thinking and judgement.

And this one. Okay. And the last one is Meg. She's in a social services agency, and she basically says they have to enforce policies which she doesn't agree with, but most of her job she agrees with. She feels like she's serving people. And so, her trade off here is, you just get up and do your job. And then she talks about how she signals to other people on the team, that makes it sustainable. So, they find workarounds. They find ways to support each other and to continue to engage in meaningful work. And her option is to not engage in the meaningful work.

So, basically, these practitioners teach us that we can't look at reflection in a vacuum, which I believe has been said over here, that the ethical dilemmas that we're looking at are rarely problems that are just of the individual, but they are connected to the systems or the agencies in which they're working, and the options that they have available to them. And they're balancing competing goals, including the need to keep their job and a desire to serve their clients. And that there are conditions, in order for reflective capacity to be built, there are conditions that need to be met, and then it's hard to meet them.

So, we can skip this, because we all know professional resources, and these are some of the things that get in the way of reflection. I think the structural and organisational are pretty clear to everyone. And that's really what the literature from 20 years ago in lawyering was telling us.

It's the third column that I want us to think about, and maybe we can get to this in the Q&A. And these are the cultural factors that did not exist when I was reading all the folks who I rolled out. Polarisation in society, binary thinking, the pressure for certainty. Right. We have a lot of uncertainty in our world, and a push which is partially binary thinking, but not only. And no room for mistakes, right? It has to do with professional precarity, neoliberalism, but it also has to do with the fact that the stakes are really high for the people that we're serving, who are often in precarious systems, to ourselves as educators, to our students. And I think these are the things that are new, and that we need to be focusing on.

And this is where I wanted to consider professional education as a natural space of encounter. Classrooms, where we're coming together. I know in our own classrooms it is often hard to talk. We are engaged in polarisation, binary thinking, all of the things that are problems. And how do we get out of that? In social work, we should be the profession that is doing this the best, and we're not.

And so, these are the four values that I think we really should be working on. I'll just say them: humility, curiosity, empathy and comfort with uncertainty.

And so, we can't just have, we need critical insights. But true reflection also needs fertile ground. It also needs openness. And it also needs room to be making mistakes, and to say we might be wrong. And so anyway, that's what I would like to say here. And that's the place that I have been exploring in my own work right to now. And I have some selective references for anybody who might be interested in them. Okay. Thank you.

(Michele Leering) Thank you so much, Corey, for that incredibly insightful, incredibly deep presentation. And I know people are going to look forward to seeing a PDF of your PowerPoint linked to your name on the abstracts tab of the website. So much richness there. And I know many of you are considering contributing articles, either directly to one of the two special issues we've arranged with the outcomes of this event, or possibly also in other publications. So, thank you so much for those rich insights.

I'm now going to introduce our next two speakers together, I think, Stella and Maria. Stella Ng and Maria Mylopoulos. Stella is the Director at the Centre for Advancing Collaborative Healthcare and Education, CACHE, a Scientist at the Wilson Centre, and an Associate Professor at the University of Toronto. Maria is a Senior Scientist and Associate Director at the Wilson Centre. She's a Professor in the Department of Paediatrics. She's the Director of Research and Innovation at the Office of the Vice Dean, Medical Education, at the Temerty Faculty of Medicine, and the Program Director of Health Professions Education Research at the Institute of Health Policy, Management and Evaluation at the Dalla Lana School of Public Health at the University of Toronto.

And you will be speaking on "*Advancing Critically Reflective Practice and Adaptive Expertise in Health*." So really looking forward to this very rich presentation. And again, folks, do be thinking about any questions you might have. I know our time for questions is going to be limited. I see people are filling in the chat feature. That is great. So here we go. Stella and Maria.

57:02 (Stella Ng)

Thank you so much. So, this bridges really nicely from Anne's to Niki's to Corey's. And I am here as a mere bridge over to Maria, because you might be wondering why, at this international reflective practice conference, are we talking about adaptive expertise? There is a reason for that that I will hope to convince you of. So, in my own career, I come from the school of Anne Kinsella. I always say I need to recognise that if I ever speak in public. And so, you'll see that I align a lot with Anne in having learned about Schön's reflective practice as an epistemology of practice and appreciating that my own experiences as a school-based paediatric audiologist, navigating indeterminate zones of practice, was something that Schön had also studied and brought to life in his writing and his work. And so, these are, as Anne noted, those messy, complex, unpredictable situations that can't be solved through following routine rules or formulae alone. And so, I became intrigued with these questions, having worked in a space where this was my everyday reality. Questions like, how do practitioners navigate these situations, and how do they learn to navigate these situations? And can we better prepare practitioners for these situations? And then over time, I started to think about all the different, connected yet distinct ways of talking about reflection and reflective practice, as these layers of lenses.

So, we heard that Dewey definition from Anne, of what reflection is. And then when we apply that into our everyday practice, as Schön has described, that gets us part of the way to the thing that I study. And then, as Anne mentioned, the critical reflection piece brings in a lens in front of the reflection, so that you are not just thinking, actively, persistently, about knowledge and its sources. You're also questioning the assumptions, the structures, the power relations that have given rise to that knowledge and maybe limited it. Maybe it's only coming from a particular group of people, or from a particular methodology. And so there could be other ways of knowing and other knowledge that aren't included. And so that's that critical layer there. And then applying that to practice, as Niki outlined, with her attention on Brookfield.

So, thinking about the structural inequities and the power relations that are shaping everyday practice, and trying to make things better, once you're able to see that way through these different lenses that you carry through your everyday practice. And so, in my own career, I started to think about how in health professions we talk about different terms, reflexivity and critically reflective practice. And at the end of the day, practically they overlap. They are different. If you want to read about the differences, you can look at this citation. But I really wanted to map out that critical layer to reflective practice.

So, what does it look like in everyday practice? And it aligns so much with what Niki and Corey have already said, that I don't need to go into this in depth, but really, the valuing of different sources of knowledge, noticing systemic inequities and imagining change. And then the workarounds piece that has already been noted by Corey so beautifully. In one of our studies, we found it wasn't just creating the workaround, it was also communicating about the workaround, and acknowledging, this isn't the system's fix, but it's what I'm able to do right now, and we can work on the systemic issues as well, potentially at another time. So really, those additional questions that I wanted to dive into were, well, how was it learned?

And others in our health professions field have also looked at this and have seen that it's often by accident, it's by happenstance. So, Rowland and Kuper found that when physicians became hospitalised, they developed this critical

reflexivity capability, this other way of seeing. Michalec and Hafferty found that med students claimed; I learn it all on the job, when I end up in these places of work, like some of the ones you've heard Niki and Corey describe.

And then in a study I did with Maria, we found that in that school-based context where I practised, that anyone who was demonstrating these critically reflective practices, making change to their practice as a result of their critical reflection, they said, "I understand this unique school system, even though I'm actually a paediatrician, because my wife is a principal." Or, "I understand the challenges children with disabilities face in schools, because before I became a physiotherapist, I was actually a teacher."

So, these aren't necessarily the pedagogies we want to rely on. We want to invite those in, personal experience matters for learning, but they're not the pedagogies that will be equitably distributed. They're just sort of by happenstance. And so that led me to a space not unlike this. It was a journal club. We were debating, if this epistemology of practice is a real thing, then shouldn't we be able to demonstrate it, teach for it, measure it? And in that paper that Anne mentioned, that I worked on with her back in 2014, we basically said, let's leave a space for the indeterminacy that reflective practice talks about. We don't need to capture it in these typical quantitative, technical ways that the field of health professions education often appreciates.

And in that journal club, a colleague of mine was like, there has to be a way, we're just not thinking of what that might be. And I said, okay, then let's do it together. Here's a group of interdisciplinary scholars. If there's a way to capture this hard to conquer thing, and teach for it, and show that we've taught for it in quantitative ways, without breaking it, without breaking its essence, then let's do it together. And so, we did that, but we didn't assess it. I'll be clear. We weren't like, this is good, this is better, this is the best reflection. It was just, is it happening or not? If we teach in these dialogic, critically reflective ways, can we shift the ways of seeing, the ways of talking, the ways of writing? Those became our measures. Are people talking differently about these complex cases? Are they writing differently? Not in terms of a reflective essay, but writing clinical notes differently. So, speaking about patients in ways that honour their complexity, that expand beyond that medical focus.

And we did analyse that quantitatively, and we did find that we were able to demonstrate the impacts of these particular pedagogies that align with critical reflection, and we can demonstrate those impacts both in what people said, so their way of seeing critically, that was the first study, and then also in how they wrote clinical letters and clinical notes, and that was the second study.

And so that was a methodological turn in my own career, where we started to adopt some of the approaches that some of our colleagues who are a little more cognitive in their inclinations would use. And that's where I turn to Maria, because I wouldn't have done any of that second part of my story without her. And so, there are affordances of adaptive expertise and learning science for the study and advancement of reflective practice. They both share common origins in John Dewey. And where reflective practice might bring us a constructivist practice epistemology, adaptive expertise and its associated teaching and learning approaches offer us, the reflective practice scholars, many effective and aligned educational pathways.

And where critically reflective practice focuses on that criticality, adaptive expertise aligns to, so Maria taught me, it really democratises knowledge and knowledge building. So, I think we tend to diverge and tend to say, these ways of teaching require alignment. That's perfectly fitting with reflective practice. There are also the sort of cognitive constructivist epistemologies you'll hear about from Maria that offer the same kinds of landing places for the outcomes that we want. And I'll close with this note from Joe Kincheloe: "We cannot simply attempt to cultivate the intellect without changing the unjust social context in which such minds operate. Critical educators can't just work to change the social order without helping to educate a knowledgeable and skillful group of students. Creating a just, progressive, creative, democratic society demands both dimensions of this pedagogical process." And so, Maria will now share what adaptive expertise is, and how the learning sciences that it supports and comes from can also offer us ways to inculcate reflective practice into practitioners.

1:06:18 (Maria Mylopoulos)

Thank you, Stella, and thank you for being such a wonderful bridge, as always. I'm very happy to be here, and I've really enjoyed the conversation so far. And I think Stella and I spent a lot of time thinking about the links between

critically reflective practice and adaptive expertise in health, and I'm very curious to have a conversation with all of you about how you see those links.

So, I will advance my slide. So, I want to start by just talking a little bit about health professions education, broadly speaking, and remind us all that, even though, as somebody said earlier, sometimes the way that we teach and learn seems like it's just the way it is, it is underpinned by theory. And so often the theories of expertise that have underpinned health professions' education have been rooted in assumptions about what it means to be a good doctor, a good nurse, a good social worker, anything. And so, thinking carefully about what those assumptions are and what they serve in health care work is an important starting point.

So, when you think about health care work and the expertise that it requires, you start to think about, okay, there are routine situations, so something you've seen before, or you know how to deal with. So, when things are proceeding normally, experts do what normally works. And I would argue that much of traditional health professions education is underpinned by this version of expertise, the idea that we are trying to educate people into certainty.

But we all know, and I really don't think I have to convince anybody in this room, that inevitably there will be novelty, inevitably there will be ambiguity, and inevitably there'll be uncertainty. So, there will be non-routine situations, so something people have never seen before and don't know what to do, and don't know how to deal with it. And that's where adaptive expertise comes in. Not because knowing things doesn't matter, but because excluding uncertainty, ambiguity and complexity from how we understand and educate expertise is extremely problematic for training the health professionals of the future, and any professionals, as somebody said before.

So, what is adaptive expertise? First of all, it's not normative. It is intended to be a more inclusive understanding of what experts actually do in the world. So we know that experts use existing knowledge to solve known problems, but we also know that many experts are able to adapt and create knowledge to solve new problems, and that in doing so, they often see problem solving as an opportunity to learn and continually develop their practice. And so, the conceptualisation here is that efficiency and innovation are really a complementary balance. So, you know a lot of things, and you're able to do a lot of things. And I think that that's important. Usually when we build knowledge, we think about it, it has to be built on something. And that's Dewey right there. But also, this idea of innovation, when things aren't working, and we have the capacity to do something in those moments, or at least know that we need to do something, or try to do something, in those moments.

So, the phrase that's been attached to this is this idea of optimal adaptability, because it's really a careful balance between efficiency and innovation. And I'm belabouring this point, because this matters for education in particular. So, we're not saying training for innovation; we're not saying training for efficiency. We're saying, think about this balance, and how we can support people in both of these dimensions of their expert work as they work and learn.

So, a really important part of adaptive expertise is the idea that expertise includes not knowing. And I see how much students struggle with this. And I think in general, a lot of people struggle with this idea, broadly speaking. But it's okay not to know, and you are still an expert. That is not what's going to cause you to suddenly not be an expert. So, in this framing, what we know is that adaptive experts build domain knowledge through experience. So, this is the problem solving as an opportunity to learn and continue.

But a key point that I do want to emphasise, as I move into some of the pedagogical implications, is that they're shifting from procedural to conceptual knowledge. So procedural knowledge is knowing what to do, and conceptual knowledge is knowing why you're doing it. And if you're going to be able to use knowledge to build new knowledge, you really need to have the why. So, if you understand why you needed to do something in a particular situation, it frees you from that procedural way of doing it, the what, in order to be able to build something new in that moment. And what this also does is position experts as the people who are building the professional knowledge in their domain of work. So that's the knowledge building, the democratisation of knowledge. It's not somebody telling you what to do as an expert. It's understanding that what it is that experts do *is* expertise. That is how we should define it, and that that knowledge matters, that is built through practice.

And I think that aligns with what Anne said at the very beginning, that knowledge develops from ongoing reflection in and on practice. And it aligns here with this idea that problem solving, and how it generates knowledge, is part of expert knowledge. And I think Stella and I were both impressed with this, so we had this quote from one of our

papers: "Instead of only executing established routines with speed and accuracy, adaptive expertise frames professional knowledge as a dynamic, evolving process. It actively embraces uncertainty, positioning the practitioner as an ongoing learner who innovates when standard knowledge fails."

So, with that definition, adaptive expertise is something that you do. It's not a credential. It's not a number of years in service. It's something that you do. So, the key here is that, having framed all of that for us, the argument would be that, going back to education in any profession, it should be preparing future experts. And I think that the key, from my supervisors in my PhD, Marlene Scardamalia and Carl Bereiter, is that it's not a spontaneous trajectory. We can't assume it will occur. So eventually learners will quit being novices without our having to do anything about it. But the important question is, what will they become? Will they become experts in their lines of work, or will they swell the ranks of the incompetent or mediocre? And what this does is it positions education as foundational and central and extremely impactful in the development of the types of professional work that we want people to be able to do. Education matters, and that's why we spend so much time thinking about it.

So, I'm going to just very briefly go through some of the learning mechanisms that Stella alluded to, from the cognitive constructivist literature, that have been shown to support the development of adaptive expertise. And I think you'll see some of the overlaps with some of the critical reflection pieces that have already been discussed, and reflection pieces. So, the first is this idea of integrated instruction. And what we mean by that is, when we're teaching, whether it's classroom, clinic, wherever it may be, explicitly giving learners connections between what and why. So, in medicine, it's the integration of basic and clinical science. And what we found is that if you give learners these explicit connections between the underlying mechanisms of whatever clinical signs and symptoms they're observing in the moment, it supports their future learning of new related knowledge, which is a core capability of adaptive expertise.

I want to be clear here that when we say basic science, we mean any form of mechanistic knowledge that explains why. And there's been a lot of work in health professions challenging what that might mean. So, what are the forms of knowledge integration that might matter in this space? And we say, understanding why. And Catherine Lucey put it really nicely when she said: "What enduring social systems, biomedical and behavioural constructs must be mastered by students to help them understand the human condition, participate in continuous improvement of health care, and prepare for lifelong learning?"

So, I want to say, sorry, I'll go back here, that for us this does include lived experience. It includes lived experience of patients. It includes lived experience of providers.

And so, when we think about mechanism, I think we have an opportunity, certainly in health professions education, and I would argue probably broadly in professional education, to think more carefully about what are those whys, what are those mechanisms? And Corey talked about some, and I think Niki talked about some earlier as well. So, I think we can see some of the reasons why and perhaps do a good job of explicitly teaching them to our students, because exposure isn't enough.

And that's the next piece, which is that integration is the cognitive activity that happens in a learner, not in the curriculum. So, putting people into places where they see things is the starting point, but making the explicit connection for them is the next step. So, integration has to be carefully and deliberately constructed and does not occur spontaneously by learning the same things at the same time or being put in a particular situation. So, there is that need for the teacher, whatever form that might take. So that's cognitive integration.

Productive struggle is the next thing I want to talk about. And I don't think that this is a new term, and I think it's been described actually in many of the examples that we've seen earlier. So, it goes back to Dewey. The origin of thinking is some perplexity, confusion, or doubt. And it's a really, really powerful way to learn that students often don't like. So, I'll say that as well. So productive struggle engages students in solving problems requiring concepts they have yet to learn, followed by consolidation instruction on the targeted concept.

And what we found in some of our work, particularly in health professions, is that struggle and failure, unfortunately for students, are most productive when experienced personally, requiring the learner to engage in knowledge generation, which deepens conceptual understanding. So, trying and failing safely is one of the most powerful ways to learn. But it needs feedback and consolidation. And that's reflected by this quote, which is: "What can

conceivably be gained by leaving the learner to search for a solution, when the search is usually very time consuming, may result in a suboptimal solution, or even no solution at all?"

And Sweller is somebody I typically disagree with, so I put up this quote nonetheless, because it is an argument that people use a lot. But I think the key is that the feedback and consolidation, if we do it well, struggle can be productive.

And the last mechanism that I'll talk about is meaningful variation. And it's really the idea that, in order to be able to develop adaptive expertise, people need to experience a sufficient degree of variability to support the possibility of adaptation. And contrasting cases, we all know, is a really good way to do that. It's a good way to have students struggle productively and learn through variation. We've looked at this both in clinical learning environments and also in classroom learning environments. But the key here that I really want to point to is that when we use contrasting cases, whether they occur serendipitously or not, the variation needs to be meaningful.

And so, what that does is it allows learners to develop differentiated knowledge about phenomena, and an understanding of the significance of those differences. So, learning depends on the meaning you extract from the stimulus, not the number of times it's encountered. And I really can't stress this enough. So, you can have a lot of contrasting cases, but if students are just thinking, okay, I'm going to memorise what I do here, and I memorise what I do here, and I memorise what I do here, that contrast is not resulting in deeper conceptual understanding and meaningful variation. It is resulting in better procedural fluency.

So, what you're getting, if you're not attending to the meaningfulness, is that in solving a large number of problems, you basically gain procedural fluency. So, you become faster, more accurate. That's the efficiency dimension, without developing conceptual knowledge. And we want both. We don't want just one. So that's that optimal adaptability.

So, I've rushed through adaptive expertise. I think there are some really powerful links, and I'll draw them, maybe, hopefully, to help the discussion too. So, the first thing is that I would say that integration of different kinds of knowledge and different perspectives requires explicit connections. So, things like asking learners why, and supporting their own asking themselves why, which I think is a big part of reflective practice. Struggle has to be productive. There is such a thing as unproductive struggle, and it really results in disengaged, unmotivated students. And variation must be meaningful. And one of the best ways to do that, we always tell faculty, is ask what if, and make the contrast meaningful and visible to all our students.

So, I'll end here. So, teaching for uncertainty, complexity, ambiguity is developing expertise. It's not extraneous. It's core to what it is that experts need to be able to do, and how they work, in whatever professional domain they're in, and whatever paradigm we're using. Learners must be actively engaged in their own meaning making, no matter what, and that's what matters the most. So, I will stop there and leave time for some discussion.

(Michele Leering) Thank you so much, Stella and Maria. That was incredibly rich. So many fabulous presentations, and just in one session. So much food for thought and development, and so much gratitude for cross-disciplinary, and even in this context, I would say cross-cultural learning between the professions. I'm actually not seeing any questions, but there are so many things that we might possibly discuss.

And I actually almost wanted to flip this question to everybody, saying, what lessons can be learned for law from health care providers in the presentations you've just heard? I am so curious. I know there's a lot of material in the chat, which I'm not having a chance to review just yet, but I will take time to, and I'm so curious about that. But I also know this is our one chance to hear from our health care providers. I wonder, too, if any of you have thoughts to share after you've heard from one another?

And while you're thinking about that, I'm going to mention one tragic gap that I identified in law. And I'm so glad, Corey, that you brought up the critical reflection literature that has existed in law. And one thing I've said, because I've noticed it in every country that I've looked at, especially in the UK, but also in the US, is that it doesn't necessarily connect to practice. And that this concept of critically reflective practice is a way we need to bring all these critical theories into actual practice. And I think what we've heard today from our health care providers is actually how that's done. And it's been something missing, and I call it in my dissertation the "critical reflection not-

so-named" literature, the "critically reflective practice not-so-named literature." And so much to learn from health about that - this whole domain of critical reflection, how important it is. And the observations about adaptive expertise too, which I see as an outcome of reflective practice. Possibly a measurable outcome, maybe not a measurable outcome, from reflective practice. And to see it laid out so well, Maria, about how we get there, has been quite inspirational for me.

So, panellists, any questions of each other that you might have? Observations you've made listening, or things you're curious about from those of us in law?

1:21:48 (Corey Shdaimah) Maybe I'll just, I don't know if this is exactly a question, or just some general thoughts. This was really, really rich. I mean, I was listening to each of the presentations, including my own. I think law education is different in many places, and it's been a long time, although I also do teach law students. And I think one of the things that I was hearing, particularly in the last presentation, is the need to sort of integrate. So, if we have a practicum component, how is the practicum component integrated into the more didactic formats that we have for learning? And oftentimes they're not, in many of the professions. And so, I'm wondering if there are mechanisms, for my fellow presenters, where that could happen. And it's not just the hierarchies, but you have different people teaching this versus teaching that. In social work, at least at the master's level, we often have smaller class sizes. But I also wonder about, in professional education spheres, the kind of things that have to happen, the scaffolding that we're all talking about here, require a lot of educators, right, to create these learning opportunities. Are there places where, what is the support for educators who are seeking to do this, particularly as we have fewer and fewer, let's say, tenured or tenure track faculty? We have a lot of adjuncts, in terms of the workplace precarity of the people who are supposed to be delivering these educational interventions or processes. So that might differ. So those are just some thoughts I'm having about that experience. And also, what is the role of students in all of this, and the experiences that they're bringing in and processing together?

One of the components in my own work is that you need other people to be there to do this. So how is the classroom structured in a way that allows for shared processing, or shared integration of the knowledge and reflection?

1:23:44 (Maria Myloplous) I can maybe take a stab at that. So, I think that the first thing I'll say is that any sort of curricular change that's aligned with what we've been talking about today takes a little bit of time. So we did implement a new curriculum back in 2016. It's ten years in and we're still working on it. We're iterating and seeing how the students and faculty are reacting. And to your point, Corey, it does require a lot of support. It does require a centralised curriculum with a degree of commitment to the principles and learning mechanisms that I just spoke about, but a little bit of flexibility on modality and how it occurs. And that's why I focused on mechanisms. So, these things can happen in many different ways. We particularly do it through case-based learning. Other programs can do it in other ways. And it requires a lot of faculty development. And we've learned that it also requires a little bit of supporting our students in understanding what our goal is when they are experiencing frequent formative assessments that they're not doing that well at, because it's a productive struggle that we're trying to create for them. So, there's a lot of ongoing and parallel work at the faculty and curriculum level, for sure. So, it's not an easy task at all. But I would say that a lot of this occurs at the level of the session, the teaching and learning, whether it's in clinical learning environments or in classrooms. And we have a lot of amazing faculty, and even those interactions between students and faculty are extremely powerful. And that's where a lot of the change can happen.

1:25:16 (Stella Ng) And I might just add to that, because I think that's why I thought Maria would fit so well here, even though she studies adaptive expertise. Because as you hear the description of adaptive expertise, as a description of what practice is like and what expertise is like, it sounds very, very similar to reflective practice. And those teaching approaches, and the focus on the mechanisms, has helped me to see that in the health professions, we tend to focus too much on whatever the alphabet soup of the day is. Right? It's PBL, it's CBL, it is simulations, whatever the modality or the method is. What really matters is that underlying mechanism. Like, why would this help learning, and in what ways?

And so, even if you think of Niki's example that she shared, we can look at all that wonderful learning that's happening and think about why. Like, what about this experience you've constructed is enabling the integration of the experiences and those critical forms of knowledge with the clinical skills and learning? And then I think that shift is more powerful for us if we want to enact change broadly, as opposed to just battling it out over PBL versus case based learning, or whatever else it might be.

(Michele Leering) Thank you so much for that. And, Anne, want to add?

1:26:45 (Anne Kinsella) Yeah, just for a moment, a quick comment, just following up on your comment, Michele, about some of the parallels across professions. And I think this crisis of professional knowledge, I think we're facing a big crisis of professional knowledge in this moment, with the introduction of artificial intelligence, and all of the type of thinking that we have to do with regard to how that will shape our practice, how that will shape our knowledge, how that will shape our reflections going forward. I think that's a huge area, another can of worms to open up, maybe, but I think it's something that will be very important for us to be reflecting on.

The other parallel, I think, between the many professions, is that those really experienced practitioners with 20, 30, 40 years of frontline experience, the knowledge that they accrue, there isn't a great mechanism for capturing that knowledge and feeding it back into the educational system, into the way in which we teach future practitioners. And it's something that I always feel, as a professor, now I'm in a teaching position, but I always feel humbled by the knowledge I hear from practitioners. And I continue to wonder about that epistemology of practice, those years of knowledge. How can we find ways to better capture that and feed it back into the system? I know people do preceptorship or mentorship, or clinical teaching or legal teaching, but I think that there's potentially more that could be done in recognition of that deep knowledge. So, there's just a thought, a reflection.

(Michele Leering) Yeah, both such interesting observations. And it does get me thinking; the conversation can't stop here. Those of us who are intrigued by this cross-disciplinary exchange really do need to find a way to get together to continue it, because there's so much to be learned from what you've said. I think AI in law is such a major disruption to law teachers. Hopefully it will push everybody to recognise the need for their own critically reflective practice. And the idea of us being able to make our tacit knowledge explicit is an outcome of reflective practice and is one of the early things that I identified as an issue, even within my own legal practice, in my own small legal clinic, within a system of community legal clinics in Ontario. Our difficulty at sharing our practice knowledge, even with each other, never mind academia, which is a whole other piece. And so that point you make again is extremely important.

Okay. Thank you, everyone. Again, so incredibly rich. I'm hoping we're going to figure out a way of getting together again, in person or virtually, I will say either one. Who knows what possibilities there are to continue to share and to learn from one another. So rich. Thank you so much for stepping into this symposium with such grace and such knowledge. It's been just incredibly moving for me, and I'm sure has got all of us thinking in other ways. Just so rich. So, thanks again.

***** Transcript for posting ends here, omitting a short Q & A discussion *****