## Hitching the car to a horse: trying to teach online as if we were in a classroom Peter Senge April 3, 2020

When the automobile first started to populate our societies, the number of cars often grew faster than the number of petrol stations. People were then stuck with this wonderful invention but no way to drive it. Enterprising citizens did what was natural – they hooked up this nice carriage to a horse that could pull it. Today, facing the unprecedented disruption of the global coronavirus and the sudden need to educate hundreds of millions of students online, teachers are doing much the same – they are delivering their standard lessons looking at a screen and students at the other end, trapped in the same predicament, are dutifully watching.

It isn't working very well for either.

This week, I had the opportunity to be part of our semi-annual education conference at MIT, part of MIT's integrative learning initiative and J-WEL– world education lab - whose aim is to accelerate deep change in education globally. Many faculty gave on-line lectures accompanied by the requisite slides. Almost two hundred of educators from around the world from primary, secondary and higher ed, along with colleagues focused on workplace learning, trouped to their screens to learn. My colleague Dr. Mette Boell and I offered an on-line version of a three-day hands-on workshop of the sort that we have done many times, which just finished yesterday.

It sort of worked. It sort of didn't work. But like many experiments that produce outcomes not exactly in line with what the designers expected, we learned a lot, especially from what didn't work.

We were both exhausted. I slept several hours longer than usual last night – in part because I was done and knew I would not have to do another day today. To accommodate participants from around the world, we had done each session twice – in the morning for those from Europe, Africa, the Middle East and Asia, and then again in the afternoon for participants from the western hemisphere. I had attributed the exhaustion – far beyond what occurs for me in a face-to-face workshop, even after 3 full days, to this repetition. But then today, checking in with a group of master educator partners in the budding global "Compassionate Systems" network, I started rethinking my attribution.

"My teachers are exhausted," shared a head of a prestigious primary school. "They are expected to deliver all the classroom content they would normally do and now do it online. Plus, for many of them, the parents are now watching. Our board has taken the stand that there will be no drop off in quality or coverage. I have been doing everything I can to get people to take a break, to have a day for reflection. But my bosses have told me, 'No.' I am so worried for my teachers." She cried.

During the online workshop, one of the educators from Hong Kong described to the group a "Shifting the Burden" example he had been thinking about. Faced with the need to deliver their curriculum at distance, they had almost all gravitated toward the 'quick fix' of learning how to "teach in their traditional modes online" rather than a more 'fundamental solution' of "innovating new ways of teaching and learning." The more their time has been preoccupied by the technology and mechanics of "getting on-line quickly," the less time they have for any sort of innovation. Not surprisingly, the primary "side effect' of "teaching the same class online" was massive "teacher burnout," all the more concerning because this has now been going on in Hong Kong now for two full months.

How can we understand what is happening here? I believe it goes well the mere difficulty of having to teach on-line as a new technical challenge. I think it is giving us some insight into the subtle yet profound influences of social fields.

Humans have evolved over a few million years as a social species. If you think about it evolutionarily, we are not especially strong, nor especially fast. Yet, we seem to have extraordinary capacities to learn and to learn together. As Mette says, "We are social before we are individual, as anyone who has gazed into the eyes of an infant and spontaneously started the dance of exchanging smiles knows." As a species, we have evolved a remarkable array of sensing capacities that tell us when a social space is safe or dangerous, that alert us to subtle exchanges of communication far beyond the verbal. Much of this sensing occurs beyond conscious awareness. A master teacher is just that because she or he has become adept at sensing and working with the social field of the classroom and has developed a repertoire of ways to dance within that field. As often with mastery, much of this is tacit, below the level of conscious awareness and beyond conceptual understanding. Suddenly in the new reality of virtual instruction, we have been cut off from almost all of this information. It is like finding ourselves in a room without enough oxygen. The energy required to do even the most familiar work is exhausting.

What are we being invited to learn here from this mad experiment of teaching all the world's students online? First, we can start to appreciate the complexity of masterful teaching. Yes, it is about mastery of content. Yes, it is about caring for my students. Yes, it about being in an environment where I am supported in continually growing in my craft. But it is also an archetypal setting for shaping healthy and generative social fields, the human capacity for attuning to the other and the space we create together that has developed over millennia.

Who of us cannot recall that "special teacher," whose passion for her or his subject inspired us? When I connect with who comes to my mind first, the person was a 7<sup>th</sup> grade algebra teacher and what immediately comes to mind was the energy of his classroom. The light was a bit brighter in Mr. Ogawa's classroom. I can see his expression of delight in this moment, so many years later, as if he was standing in front of me now. I can feel my excitement at things like quadratic equations, even though I have no idea what exactly was quite so exciting. In those classes, I was learning far more

than algebra. I was learning how one person's presence could shape a space or social field of profound engagement, or perhaps engagement with the profound, and it was a lesson that has never left me.

How might understanding of all this help us see options in our present predicament? When we talked about it this morning, the master teachers on the call said simple things. Take time off. Take time to reflect. Sleep. Develop content designed to involve parents. Encourage the students to go climb a tree, or cook something fun in the kitchen, or play a game with their family - "activities that are 'field like," said one. In short, connect with their earth space and their social space – and do it in ways that are fun.

One asked, "Why are we obsessing so much about getting thru the curriculum? We all know that this is not business as usual? Why are we trying to make it the usual?" Another, referring to terms in the "systems thinking iceberg," a tool all of the teachers and students in this network know well, observed that "the artifacts of teaching have changed radically (like moving from classrooms to on-line) but the mental models have not."

Another offered a comment that appeared tangential but looped back to the same territory. She noted the many teachers are taking advantage of various short on-line mindfulness programs to cope with their stress and then asked, "Why are these so less powerful than when our group (of master compassionate systems teachers in a year -ong certification program) meditates together?" The answer was pretty obvious - the social field. Doing mindfulness practice as an isolated individual online is very different from doing it within a field shaped by people have been practicing mindfulness together for a year.

This last comment opened into another question confronting not just educators but all of us today. The conceit of the on-line world is that it offers "scalable solutions." "We have found over the years," said one, "that there is a difference between small groups of students (five to ten max) learning together and more than that. When the group gets larger, something is lost." Scalability may yet prove critical – in a globally interconnected world we will need to learn how to do things in globally coherent ways. But part of this learning may hinge on appreciating what cannot be done at large scale and happens only at far more intimate scales - and how each can nourish and guide the other. Just as master teachers learn how to balance small student groups where students can help one another learn with learning in the class as a whole, we are all moving up a very steep learning curve in understanding what is intimate and what is scalable.

One of the most surprising ideas came from the primary school principal who, near the end of our conversation, said, "I have turned to old fashioned writing." She went on to explain that she was sending hand written letters to students by the mail and enclosing a self-addressed envelope so they can easily reply back. "It has been wonderful to read what some are writing to me. We do so much looking at screens and typing on keyboards, we don't know how much is lost from the act of taking a pen and writing our thoughts and feelings – until we try it."

At some point the present social distancing mandates will ease – what will happen then? This may prove to be the most important question of all. "There will be tremendous pressures to go back to what is familiar, to business as usual," commented one of the master teachers. "But it is exactly that business as usual that needs to change and has brought all of us together."

History often seems to present bifurcation points, where two very different futures are present. We are living in a moment of urgency. We must do what must be done, just as emergency room doctors must do what they can do. But will the shock of the moment open a new path for the patient or will she or he be back in the emergency room again soon? Sanjay Sarma, the MIT Vice President responsible for our global education initiative, talks about helping accelerate an unfolding "global renaissance in education." If Sanjay's premise that this is s a time of renaissance proves valid, perhaps the lessons being learned today in this historic global experiment in virtual education - about the artistry of masterful teaching, about classrooms and schools as generative social fields, and about what can scale and what must remain intimate – will have proven invaluable, and the extraordinary suffering will have had a larger purpose.