The Art of Teaching

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JF: In your own story and development as a teacher, who were some memorable teachers for you and some memorable learning experiences and mentors you had in your development as a teacher.

BM: I gave a thought to this and what comes to mind is not a medical teacher but what comes to mind is Boy Scouting and going for merit badges. I think messages that where taught young, all though I learned them 20 years later, may have more strength than an immediate impression. There was a fella I was going for my Eagle Scout, and had to accumulate the right amount of merit badges, like moving up the corporate latter, and on that journey I met a fella who was an ex forest ranger, and he was in charge of evaluating you if you wanted to go for the reptile and amphibian nerd badge. That for some reason was always a passion of mine, nature and animals etc. So I spent a lot of time with him, and he seemed very interested in raising snakes and amphibians, and of course was extremely knowledgeable. He spoke very little of the genius of the species and eating habits, he would demonstrate for me the handling of the animals, and how to find the snake holes and the best ponds. And it was all through him modeling it and doing it and very little dialogue. It was all in how he handled the species, the gentleness and respect he had for the environment. So he was a real modeler, and had humility about what he knew and had no reason to labor a young fella with how much he knew. But he was one of those folks who emanated depth and a real passion for what he did. I found out later his wife was dying of melanoma and he never mentioned it to me but he always would delve into the subject of animals dying a lot. Clearly on reflection it was a part of his encompassing road. So I corresponded with him up to 7 years later, even in college. I wrote to him and told him how much he made a difference. Scouting allowed me to get out of a tumultuous home. It was a sanctuary to get out into the woods. He was profound along the path.

JF: Do you remember his name?

BM: Yes I do, Fred Himmell,III

JF: Where there later mentors in college or in your medical education that stand out for you?

BM: Yes, there was a fella, a history teacher, who had played professional trumpet on a cruise ship from Mexico. So then he thought he’d go into college teaching history, colonial history. A very colorful guy and what I appreciated about him was he recognized early that he was talking to people who weren’t going to fall in love with the subject, so he branched out with like the history of jazz, or the cultural effect of the mien on South American civilization, very different than the Massachusetts colonies. I very much appreciated that. You could meet at the cafeteria with certain teachers, and he was a very solid comfortable man who had such enthusiasm for what he did. It was hard not to get caught up in some of that. In medical training I ran into a lot of stuffed shirts people who were very conscious of the role they had carved out for themselves, but along the way I met some people who really had the humility to realize how little they knew underneath the surface or depth of what we know of doctors. And I remember one in particular that imparted that homo Socratic and eventually find out you don’t know what you know, that kind of atmosphere. But that in the mean time you have to take care of business, and we’ll go over that. I really appreciate the pragmatics of that, looking back.

JF: So in reflecting on demonstration, modelings were very key for you, bringing you in to participate directly. Mr. Himmell’s enthusiasm for the subject sticks out. You mentioned humility on occasions. Does that kind of summarize the key components of teachers who influenced you on your journey as a teacher?

BM: You covered it all. That was really great.

JF: And humor, I’ll bet, I’ve noticed you have a sense of humor.

BM: Yeah, that which doesn’t go over the head. That which I could perceive as a teenage and getting older, it lightens the message, if it’s delivered with meat behind it. Just the humor can sometimes disquise a problem with teaching. But sure, it’s best to know your student too.

JF: Tell me more about that, getting to know your learner.

BM: In regards to humor or just in general for teaching?

JF: For teaching.

BM: For me and I hope the people I’ve tried to pass on something too, it’s useful to find their reference point where their knowledge is, or what their comfort level is, before I start spinning wheels or re-inventing their wheel. So that’s been a good thing for grounding, you know a person tells me they don’t quite understand postpartum depression because of working with several patients, I don’t see the need then to belabor that. Gee if you want to call me in with the next patient you see who is suffering with postpartum depression. That’s a ground base to start from. I try to get, I’m not too good at it yet, the cognitive learning style. As you well know, some people what concrete matter; they want 1, 2, 3. It makes them feel more comfortable. First order a prostate, then a CBC, or whatever. You make an algorithm, or if they’re not breathing, call this. And that’s understandable for a starting person in any field. It’s a base level to work from than hear about the nucleus of protons of the product. So that’s important for me to do a better job of teaching. That’s not easy, because I haven’t got a lot of time to get to know the person. I use intuition sometimes. My personal conceit is that my intuition is very good. But who says they don’t have common sense, right? Trying to make the knowledge, especially in the beginning, not theoretical, but try to give some basis for the direction we are going. What is there to support when I say to them “well the way I approach this is, or the way I treat this is, in the month of August 2010”, and I try to throw in a little substance behind it. And that can be quite tough in the field that I’m in, quite gray.

JF: You mentioned here, and it’s been a real common theme amongst all those I talked to, getting engaged on where the learner is at. And then bringing the educational dialogue to that level, rather than attempting to get that person to move to the teacher’s level. Bringing it to the level where the resident or learner is.

BM: Yeah, that would be ideal. That’s what I aim at.

JF: But it can take some time, intuition can kick in quickly and help you adjust, you mentioned some learner styles that you’ve run into over the years. Is it more effective for you to adapt to the learning style of the learner. Or are you finding that the learner adapts to your teaching style. Which of those two do you prefer?  
BM: I prefer to teach to where they are at, but I am usually the main obstacle to that.

JF: Tell me more about that.

BM: Either wanting to hear my own voice prattle on about how much I’ve learned over the years. Or kind of a focus that this is what you really need to know, because you’re starting out and you don’t really know yet what you need to know. So sometimes that can be too constrictive. So there I’m the obstacle standing back a little, getting my radar to pick up more signals. I guess that’s part of the price of being human.

JF: When did you begin to be aware of that?

BM: About an hour ago! Probably when I realized how much in a rut of the style of teaching, you know you do things on autopilot, as I think so many of us do when you get into your field. It’s like a brewmeister must know the taste of his beers. Know the age, the date. So when you’re doing something for such a long time I forget that it becomes part of my mental reflexes. So how do I distill that down, instead of saying “oh you got to put in 40 years experience before you know this patient is accurate”. So that took pushing myself, having energy, start reading the materials that have been published for years by educators, on how to step outside yourself. And how to really catch signals as your imparting information from the person you’re trying to impart it too. Otherwise it’s just like a membrane; with all the cat irons I am trying to slip into this membrane for that person who doesn’t have any on the other side, who just have the andirons. One way, through lectures, try to see if I can avoid that and not be seduced by my own voice.

JF: That probably a very common theme though, for younger teachers or newer teachers to feel the pressure to show and demonstrate they know enough. Would you say that it is fairly accurate, at some point you evolve as a teacher, which it sounds like you have over time. And I am aware that that may not be that productive to demonstrate to the learner how much you know.

BM: I would include older teachers too.

JF: It’s a work in progress.

BM: I think I’m over the curve, in many ways.

JF: In your guesstamation would you say you’re more of an effective teacher now, than you were 20 years ago?

BM: Yeah, I would say that.

JF: You’ve progressed down a path and its one with hopes that these interactions is to provide some of the newer teachers some guidance so that they may not have to wait as long as the rest of us to figure out how much we get in the way of the learning experience, through trying to demonstrate how much we know, which is actually ubiquitous in the health care training models I’ve come in contact with. There is a perception of the unilateral transfer of information, now days it’s more bilateral. I hope so.

BM: I think so, I mean there is no evidence base for what I’m saying.

JF: Well, that is part of the challenge, I mean the medical literature, some of the reading you did is outside the medical realm.

BM: Oh, definitely, it’s by people who deal with High School, Jr. High School or Elementary. And have been twitting their thumbs for decades, and the knowledge had been acquired.

JF: So you came across some substantial literature body outside of health care that discusses how to be a more effective teacher.

BM: My sister-in-law has been a public school administrated and teacher and principle, so she makes those resources available to me. I try to read them and probably get through about 30%. It helps.

JF: The main principle you gained from that was stepping away, and getting ourselves out of the way of the learning experience. Were there other important techniques or methods of teaching that you got from the outside literature?

BM: Well, on the grade school level they stress different approaches, some were sensory, had a sensory component, perception component, and auditory or visual. They try to maximize especially with young people. But what I felt was most helpful was ancillary learning. When you’re teaching a child to build a pyramid from the period of Ramsey, that’s ancillary to how they just pile the stones up. Start learning about the culture of the people who build it, it becomes ancillary to your main goal which is to build this pyramid structure. And then so much is tacked on because your brain can retain it by virtue of the facts, you’re in the process already. And I think for medicine there is nothing that equals right working with a patient who has a certain illness and then when you read about it that’s the glue, you got a total combo. Whereas if you read about it in the abstract, well for me, well that’s just it, abstract, so I learned about ancillary learning, I learned about step learning. You don’t have to learn about ABC. There are times when you teach A, but you can jump to C, and come back to B. We are not talking about geometry or math but conceptual things.

JF: Have you been able to utilize some of those things in the teaching you provide to the residents? You really teach more than residents, you teach attending, probably other psychiatrists. Do you tend to approach those interactions in a similar fashion? Or are they different depending on the level of person or event?

BM: Yeah it’s hard or dangerous to presume what the level is, it can be tricky, especially with a fellow colleague. It’s easy enough to talk down to people we call patients, but if you do that with your colleagues, you’ll hear about it one way or another. So I would say mainly I do it on the level of a first year or second year or third year. I’m not going to be focused on when not to use this medicine, for instance, with a first year, or eight different anti-depressants, “let’s go through the list, what are the side effects”. So I try to gear for the first year person who is hitting the floor, and okay I’ll model the patient. “You know I’ve been on three antidepressants, I’ve had three residents, I’ve been on the last one for 6 months, and it hasn’t done anything. What are you going to do for me Doc?” Those are awkward experiences. So I’ll role play a little bit. Where is it’s a third year, I’ll be dealing with what I call eternal truths. I like to believe that what I am presenting, how to treat diabetes or congestive heart failure, that’s going to change dramatically in the next 7-10m years. With glyburide and all that stuff, they’re going to have new products and hopefully superior products. But I hope that what I’m passing on would fit in the thirteenth century and hopefully fit in the thirtieth century. That people are going to have anxiety, they’re going to have bad down moods, what we call depression or not. They’re going to have enormous reactions to stress. They’re going to have all those things that we as humans have, granted there are only so many colors in our palette, but they can be mixed in a lot of different ways. I try to pass on how you establish, relatively quickly, rapport. How do you establish an alliance? Which is really what I’m talking about, so that you both don’t go into a black alley and bump your heads. What is the patients expectations , are we teaching our residents to hear that? Hoping to impart that you can’t do it all. And you have the strength of ten, because on your phone list you have ten people with much more experience in different things than you have, whether it’s social work or a nanosphere, or a specialist. So that’s what I’m very conscious of doing with a person who’s done some work on the ground already. Things that they can always keep in there, I call it keeping their arrows in a quiver. When they’re attracted to a patient or thinking about a patient, how they can pass them on to a colleague, which may be needed but still to reflect on it. It’s kind of a long answer.

JF: So it’s sort of building in reflective moments in the process, so that awareness of what’s about the patient, and what’s about us.

BM: And how essential it is. Because who wants to do it really. It’s easier to just say it’s their problem, so.

JF: Maybe we can talk briefly about anxiety, because that’s another area that interestingly many other folks have talked about. They identify whether the resident, the most common example, is in an anxious state, or in a calm state. And if not in a calm state, then before they even try to teach them anything, they attempt to address the anxiety level of the resident. You’ve mentioned similar kinds of things; I just wanted to focus on that for a little bit. How do you go about addressing the anxiety of the learner?

BM: First I try to use my radar to ascertain it because it’s not necessarily a person who is trembling, sweating, quivering voice. No, most folks are fairly sophisticated from what they’ve gone through taking tests and exams and everything else. So generally what I’ll do, or specifically what I’ll do, is doing a small talk first. Do a little background, what have they done with they’re time if they didn’t go directly to med school, what is there home town like. Just small talk, it’s the same kind of thing if you’re going to do therapy with someone. You establish a little connection with a human being. It may sound like cocktail talk in the beginning, small banter, until then the person recognizes that it’s time to do the work process. Which therapy should be, work. But with a person you’re trying to teach, I think just letting them recognize through the conversation, it shouldn’t be more than 5 minutes. That you’re there to work for them, that you’ve got their back in a sense. And I think you can get that across and you’re less of a grater to them. Someone who is going to be writing a note of how they’ve done on their rotation.

JF: So what might not work would be saying, “I notice your anxious, you need to stop being that way so I can teach you something”. That might not work to well.

BM: Probably not, it’s a start perhaps to a hostile resident.

JF: Well could you summarize perhaps you know that, lets imagine your sitting with a brand new graduate of some residency , could be this one, could be any of them. It’s pretty clear that they have determined that being a teacher is something essential and important in their career, and their kind of asking you, you know, “how do I do this without flopping around, what’s the approach I take to teaching so that this works out for me to be successful?”

BM: Who teaches the teachers, and how?

JF: Right.

BM: Well, let’s face it. The reality as human beings is we have so many variations of ways to get to Rome, so to speak, and certainly you know and I know that I’ve been taught many things that are just wrong, not because of a point in time, we have the knowledge we had, but things that were just not safe, things that just did not fit the way it should be. Whether it was, I was told children should not be able to go see their sick parent who is in the hospital, because it’s too traumatizing for them, a lot of these kinds of things. Or, when kids had rheumatic fever we had them in bed for months. What must that have done to their development? It was wacky, though we didn’t know it then. That’s what we were taught, right? Like generations before, maybe avoiding certainty, encouraging then to show enthusiasm and still retain why they chose that field. Less likely that they will say, “I should have gone into the family business”, then if they’re starting out the energy there. That’s a powerful teaching element. Just enjoying your field or what you do, and hopefully you know it. So I think it does go back to me doing no harm, not talking down to this person you’re trying to teach, because they know some things you’ll never get a grasp on, different backgrounds, different experiences they’ve had. Outlining what it is that you want to pass on to them, recognizing that you’ll only cover 50% of it, maybe less. But if you can do it, how can you do it in a way that can be retained, so at least they can go back and dig up a resource to make it available to them. How much can we remember, no matter how bright we are. I encourage myself and anyone else to show a young doctor what we do, bedside, interviewing, as many different situations that you can have, whether it be an angry patient, a seductive patient, the patient who’s dying. If you’re an internist family practitioner, to demonstrate to a young doctor who you examine that patient as a human being, whether you grip their hand, or you sit on the edge of the bed, you make a certain kind of eye contact. Those things I think a resident is hungry for and will retain, unlike going down a list of meds, that they can read anyway, their all bright.

JF: I’d like to open it up for the audience to ask questions. So, would anyone like to ask Dr. Miller a question about teaching?

JF: You may have settled the entire matter! So I’m just going to try and summarize a little bit of what I heard that you would bring to your interaction with the younger new teacher. You mentioned avoiding certainty, avoiding harm; try not to teach them the wrong things if you can help it, although we know that science changes directions at such a frequent periodicity that in ten years what we know is right will become absolutely wrong. Demonstrating enthusiasm and going at the bedside, that is a theme that you’ve brought up to me many, many times, and you’ve expressed some disappointment in our program, not necessarily doing that much, more rounding, periodic visiting of the patients. How do you think a system like ours could increase the amount of bedside teaching that we do?

BM: Now I’ve become a critic. I have noticed, not the good ole days when I was young, I have noticed over the years that that has decreased. That the rounds are done in a very intellectual fashion, you sit down in a room with a chart and a lab, and certainly the fine teachers we have tried to help a resident think like a doctor. There is thinking like an attorney I’m sure. But I just see the accent on discussion. Now these are very ill people, understandably, a lot of concentration addressed to them. But I just see it detached from the person who is in the bed, and therefore not getting maybe the full picture for a resident to see how an experienced physician may have shortcuts that are not risky, shortcuts where you don’t go for the whole neurological thing. You have to forget things they taught in med school to a certain degree. Like a review of systems, no one goes through an endless list of all the physical organs, you’d never get anywhere in three hours. So I think going to the bedside maybe an incredibly simple but profound tool. And I am concerned about less and less of that being done. I think you can make lots of excuses, but I don’t think they are adequate excuses.

JF: Well, I think some of the reasoning I hear about the bedside issue, often attending will say “well, I want the patients to see the resident as their doctor”, and I think what you are describing is, when you go into the room with the resident and not assume that role, assume that role of the person in charge, For example the person might enter the room and say “I work with this resident” not say “I am the attending, the final authority, all the answers come out of me “. When you bring that into the room, it can undermine the resident in that role. Is that what your sort of saying that there can be a balance that the resident is demonstrating a high level of responsibility, and yet the attending can demonstrate other refinements, and how to gain information and how to care for a patient. Is that what you’re talking about?

BM: You don’t want to undermine a resident, their slowly developing their identity, that may not happen until 5 years after they graduate. But a good attending has to be respectful to the patient and the resident. If they go in there like “mount Olympus is here”, they’re not doing anyone a favor.

JF: It could be that some of the senior attending experienced that a lot in medical school and so if maybe we have over compensated, by not going into the rooms as much with the resident, attending go back later, so I think there are a lot of ways to stay engaged. But that’s a good point, demonstrating. You had mentioned in your first description of Mr. Himmell , that that was one of the primary aspects that you noticed, is that he demonstrated, in this case the care of a reptile, but that carried more meaning for you it seemed than any list of species. So that sounds very similar to the principles of your early teaching mentors.

BM: It’s very interesting that I can feel intimate with something like a snake, right, the cold blooded, it started with herbatology.

JF: There are many individuals that prefer their dogs to people, and I’m sure there are snakes in that category too.

Q: What if things aren’t going well when your teaching, do you just try to be positive and supportive or is there a point when you get critical. Or is there a point when you have to say”heah, things aren’t going well”.

BM: At the point in time with them or later.

Q: Would you just go ahead and say something right away, at the point in time?

BM: Sure I think I owe them that. If I sense that their not comprehending, I wonder if I ‘m transmitting very well for one thing. I know they’re not stupid, that’s a given. I know the cognitive abilities are strong. Anxiety may block a lot of it at the time. So first I want to check the transmitter, which usually is me, and then I want to be able to say, “Gee, I’m not being useful here, what’s getting in the way, am I just repeating things you’ve heard”, or whatever it is to give them a chance. Just like trying to have a patient to continue taking their medicine, sometimes I have to say to them, “is there anything that is going to make it hard to take twice a day?” And they’ll answer “No, no, no”, but they won’t take it at all, which about 50% of the people don’t. The residents particularly, I want to say to them, “heah, this is an area that I really think you need to get grounded in, and why don’t we check in with each other in a month or so”. I want to see if you’re feeling comfortable with it. Because their only going to pass this way one time. And I feel I want them to get the most bang for their buck.

JF: Well alright, thank you all for coming, and thank you Dr. Miller for taking the time to meet with us.