



## REFLECTIVE WRITING CHALLENGE 7x7x25

The Professional Development Committee invited faculty and staff to create blogs with a total of 7 pieces of writing, over the span of 7 weeks with 25 sentences or more. These blog postings are about **teaching, learning, and student success**.

The short term goal of the challenge is to give staff, administrators, and faculty a playful space to share and learn and to see what colleagues are doing in classes and on campus.

The long term goal of the **7 x 7 x 25 Challenge** is to push teachers, staff and administrators to be reflective practitioners in the field of education and share their reflections with colleagues. While the seven weeks of writing may be a start, we hope that some of the participants will continue to write and share their thoughts about the educational landscape.

**Credits:** The writing challenge was originally conceived by Todd Conway at Yavapai College and curated for Foothill by Carolyn Holcroft.

## List of Participants

Benjamin Armerding

Ashley Bowden

Falk Cammin

Patti Chan

Maureen Chenoweth

Amy Edwards

Karen Erickson

Valerie Fong

Katie Ha

Allison Herman

Carolyn Holcroft

Kate Jordahl

Eric Kuehn

Scott Lankford

Oudia Mathis

Richard Morasci

Patrick Morriss

Rachel Mudge

Jennifer Mullin

Teresa Ong

Kathy Perino

Jennifer Sinclair

Mary Thomas

Stephanie Tran

Nick Tuttle

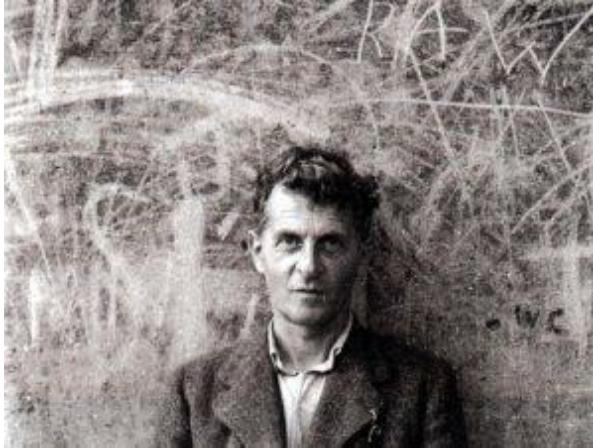
Charles Witschorik

Bill Ziegenhorn

Teresa Zwack

**Week 1:** January 2, 2015

WORDS



There's this story about Wittgenstein in the trench warfare of WWI. Supposedly, he sat down in the middle of no man's land, bullets flying over his head, and started scribbling in a notebook. His platoon was flummoxed. When they later demanded an explanation he said he realized he was having, in that moment, the most important thoughts of his life and had to write them down so he wouldn't

forget.

I don't know if that story is true, but what he was writing came to be known as *Tractatus Logico-Philosophicus*, regarded not only as some of his most important thoughts, but also one of the most important contributions to the discipline of philosophy. There is one idea from its preface that I almost always share with my students:

the outermost edge of language is the outermost edge of expressible thought; whatever falls on the other side of that edge is nonsense.

In class, this is supposed to turn into an interesting debate about the imprecision of language or linguistic determinism, but where it often ends with my students is at a question of their own vocabularies. They wonder if the outermost edge of their own language, is also the outermost edge of their own thoughts. If their own expression and articulation of ideas is governed by the words that they know. Are there thoughts they cannot easily express (or even access at all) if they don't have the words for those thoughts?

Across the college, many of our disciplines are networks of key terms; so, as students learn our vocabularies, they also learn our ways of knowing. They start to say things like “social contract” and “eigenvalue” and “identity,” and these words, if they are not only jargon, uncover an entire world of ideas – they push that outermost edge by another inch.

I’m remembering my first year at Las Positas College. At some point, in one of my critical thinking courses, the instructor was using the word “presupposition.” I’m sure I had heard the word, and read it, but I very clearly recall the first moment I used the word for myself, and understood its meaning, and meant its meaning. And it wasn’t simply that I had added a new entry to my lexicon; the word actually gave me a new way of looking at debates, and the ways people dismiss one another before they even begin to speak. In arguments, many of us *presuppose* we are already right, and *presuppose* the other is already wrong. We do this even to the extent that if someone says something compelling we will already *presuppose* there is a sufficient response that we just haven’t heard yet. So the word itself, in its very existence, taught me this critical move – taught me to understand my interlocutor’s presuppositions and to especially recognize my own. Only then could we really begin the work of persuading each other.

So, what words are we teaching to our students? And do we teach those words in such a way that they open up whole new worlds of thoughts, new vistas from which students might see previously unseen ideas?

## **Week 2: January 18, 2015**

### **FEAR**

A few years ago I got an email from a student that made the hair on my neck stand on edge.

Sometimes lessons lead to odd conversations, so while I hadn’t quite planned it, students were asking about the ethics of torture. It had been in the news that week. I

wasn't too surprised, didn't think much of it, until I opened my email that afternoon and read through a veteran student's harrowing experience in Iraq.

He said the small group discussion from that morning had made him nauseous, made him shut up, made him feel like he wasn't allowed to speak. His fellow students were insistent that torture, in all cases, was reprehensible, yet he, a war veteran sitting among them, had participated in some of the very behaviors they condemned as immoral. He emailed me later, saying that none of his classmates could possibly know what it was like to watch a close friend die in front of their eyes from an IED. None of them could actually know what they might do if the bomb builder was then in their hands... in a secluded room of a base. But there he was, sitting in the classroom, in our ivory tower, listening to us all debate abstractions that were for him realities, that were his own memories, and he felt he couldn't speak. In so doing, he would have subjected himself to the moral judgements of his peers.

In another class, a student told me about the effects of her PTSD. It was her first day of college so, being diligent, she sat in the front. As the rows filled in behind her, she panicked. Too many people were at her back. Once I called roll she immediately left and from that day forward always sat in the far corner, "near the exits." Another student told me he didn't know why, but when we were talking about thesis statements, he started having flashbacks from the war. That was why he had left early.

And these hidden fears are not exclusively experienced by our veterans. Not too long ago, an athlete student confided in me that she almost never admitted to her teachers that she was an athlete as this information might elicit their prejudice – *maybe she's a cheater?* There was that [article](#) about athletes cheating in an ethics course at Dartmouth not too long ago.

I bring up these stories because they remind us that we frequently don't know the range of life experiences that are brought through the door by those fifty people in the classroom. And while I don't think this should prevent us from including challenging materials in our curricula, I am curious to learn ways that we might give our students opportunities to process their fears. Perhaps our coursework can allow for reflection,

catharsis, and recovery, and ultimately allow our students to effect change through their own voice.

### **Week 3: January 24, 2015**

## **DIFFICULTY**

Students avoid it. We all do, even as teachers. What is difficult is not attractive. And yet, if we admit it, difficulty is often there in our favorite memories, in the challenges, the surmounted tasks, the laughter after tragedies. I remember being a student (who am I kidding, I do this now, did this earlier today), when I would “skim” through difficult passages in the readings my teachers assigned. I would dodge such moments even though these difficult places were often the exact locations where I could perform the most learning. They were gaps. So why not try filling them in?

This is why I am interested in the Difficulty Paper. The concept of the assignment comes from Salvatori and Donahue’s “The Elements (and Pleasures) of Difficulty” and, as I understand it, is built in a series of core steps:

1. What is most difficult about this text/problem? Why is this difficult?
2. How will you attempt to resolve this difficulty? Why will this plan work?
3. Attempt to resolve your difficulty.
4. What did you learn?

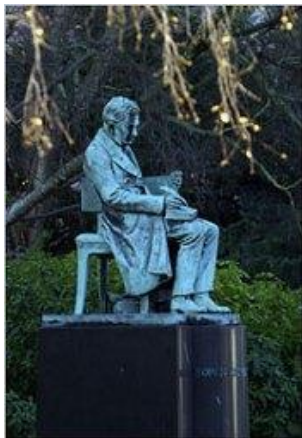
Obviously, any teacher should add and subtract from these steps in whatever way is appropriate, but really, I’m curious to know how this particular assignment would translate into other disciplines outside of the Literature classroom in which it was invented. For me it is without a doubt my favorite student work to read. I enjoy it so much I almost can’t even grade the prose. So if you start doing it in your math classes, your biology classes, your physics classes, please send along some of your students’ work. I’d love to see it.

In my own class a student reflected on his Difficulty Paper, writing,

As class goes further, the prompts become more self-guided and open-ended, which poses a challenge by itself. This prompt was specifically hard since it flows unnaturally and against intuition: usually we try to avoid difficulties, but in this case it was necessary to face it directly. Being out of the “comfort zone” of traditional writing is challenging, but rewarding in the sense that it stimulates creative thinking and broadens one’s point of view.

So, I’ll put this to both teachers and students: *What have you avoided learning? Why not learn it?*

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*One day Kierkegaard was sitting in his garden, smoking a cigarette, troubled by the crisis of his own boredom. He was wondering what he could possibly contribute to a world of such rapid innovation. There were all these brilliant people making things easier, faster, simpler – the printing press, the steam engine, the whale oil lamps – and it was in this despair he was struck by an idea so compelling he didn’t even realize his cigarette had burned to the quick, singeing his fingers. Naturally, he lit another, his eyes wild with intrigue: “I, Kierkegaard, will do something that no one has ever yet done. I will not make things easier; I will make them more difficult.”*

**Week 4: January 31, 2015**

## LETTERS

The student threw herself into the chair of the adjunct hoteling office, gasping, unable to catch her breath. She had run across campus to tell me the news, to tell me that she had just been on the phone with Peter J. Gravett, the California Secretary of Veterans Affairs. They talked for, *like*, over an hour.



Earlier that day she had sent him an email, a Letter of Civic Engagement I assigned in English 1A. She used it to write about the way she felt unprepared for the college classroom after returning home from Iraq. Sure, the military provided her an entire spread of re-acculturation courses – *How to Write a Resume, How to Find a Job, How to Interview*, even *How to PICK a College* – but she realized only two weeks into her first semester that she had absolutely no clue how to be a student, how to study, how to read difficult texts, how to write essays, how to put up with lazy fellow students. This was all bewildering in her veteran experience. So she wrote an email.

After reading what she had to say, Secretary Gravett called her that afternoon. He expressed his surprise at never hearing any of these issues before, and he wanted to know everything she could tell him about her experience as a veteran in college. He even invited her to a working lunch with him and his secretary so they could draw up ideas for a new course.

She had changed the world, and had done so with nothing more than her words.

When I first assigned this essay (I got the idea from some 4Cs article), I wasn't even thinking about the obvious possibility that recipients of letters might actually respond to those letters. I was only trying to teach the commonplace lesson of every first-year composition course: Audience Awareness – "Who is your reader? How do you persuade them? Ethos. Pathos. Logos. Blah. Blah. Blah." It didn't take long to figure out this assignment was doing something more than that.

Though I hate to admit it, much of what I assign to students seems to vanish into a void. I read their assignments, privately grade the prose, and serve as a kind of casket, an insulating conclusion to their work. It ends with me. The teacher's grade book is where student projects go to die. Many of us tell our students (tell ourselves) they will need what we are teaching them, they will use it in other classes, use it in their lives, they are becoming critical thinkers, well-rounded individuals, more marketable employees, but



we don't often create an *immediate* contact between their work and the world around them.

This is why the "Letter of Civic Engagement" fascinates me. I think it might be the only essay I assign that actually does this. So if anyone else is interested in doing these kinds of assignments, whether in English or (especially) in other departments, then we should talk. I'd love to collaborate.

## **Week 5: February 10, 2015**

### **IMPOSTER**

*"Hi. My name is Ben. I'm an imposter and I don't belong here."*

A student cried in my office the other day. It was not the first time this has happened.

At first she was just telling me about her situation, her intention to withdraw from the course. She had hired a private tutor and this tutor advised her she didn't belong in my class due to the inadequacies of her writing. While she continued talking, I pulled out her last in-class, hand written quiz and gave it a quick read, glancing back and forth to let her know I was still listening. I turned to her, incredulous, and interrupted, "I think you can pass this class." By the last word of the sentence, she lost it.

This story is familiar to me. It's probably the case with many students, but I think I had imposter syndrome throughout my education. From K-12 through to college and on to its fever pitch in grad school (even now as a teacher), I have always been waiting for someone to discover, at any moment, that I am a fraud, that I don't actually belong here, that I'm not smart enough for college.

Looking back, I think this might be what has actually drawn me to community college – the way that we serve as an access point to all students, giving anyone a seat at a table

where they may have been previously excluded. From wherever students come, here they find a unique entrance into academia, art, culture, civics, the economy.

But I didn't always realize how important that was. Right out of high school, I enrolled at Las Positas and we had our own nicknames for the place: *Lost Potential*, *The College Behind Costco*. Chabot, the sister school, we called *Sh'Blew-It*. We had convinced one another that no one should be proud of enrolling in a community college. It wasn't something you told people voluntarily. It was a last-resort thing, a sign indicating that someone had arrived with a serious case of failure. So of course I couldn't tell anyone the truth, that I was completely intimidated by the prestige of college, of any college.

Both of these attitudes seem to be common among the students I encounter in my courses. There are two kinds, those who think they aren't smart enough for college and those who think they're too smart. Both think, "I don't belong here," but it's the first group that interests me the most. For them it could be the smallest comment that might disabuse them of their own self-doubt, something as small and easy as a teacher saying, "You are doing just fine in this class." Actually, it was this exact comment that stopped me from dropping out of grad school.

So to any students reading this or to any other teachers, I would want to say this: if you are here, you belong here.

**Week 6: February 15, 2015**

### PROXIMITY

Here in the Bay Area we are obsessed with the Prius, and even though none of us were really thinking about it, we all threw the auto mechanics into a frenzy a few years ago. For those of you who buy your cars new, you know they come with service contracts – you wouldn't think to take the car anywhere but the dealership when you need maintenance. But a few years ago, after it had been a while since all those new hybrids

appeared on the freeway, the first round of service contracts expired and Prius drivers started pulling their cars not into the dealership but into the neighborhood garage.

As it turns out, none of those neighborhood shops in the Bay Area were equipped to handle the strange new car. For starters, the power train was unlike anything they had ever seen. So when two community colleges, Skyline and Contra Costa, started turning out hybrid specialists from their newly minted automotive electronics workshops at the exact same time, the students got hired so quickly some of them didn't even need to interview. This happened because these schools were carefully watching trends in their community and then put together programs that gave their students a competitive edge.

Three years ago, at Diablo Valley College, they found there was a local market for early childhood development; they then further discovered that most of the preschool/daycare employees were working entry level positions because they lacked the necessary certification for higher income. Why did they not have those certificates? They didn't have enough language proficiency to take the certificate classes. So DVC created a cohort of linked courses, curriculum that added ESL classes alongside their Early Childhood Development certificate series. The students who completed the program went from making minimum wage to making \$16 an hour.

As an adjunct, I taught English composition courses in a similar program designed for students interested in the trades. It was so successful that some of our students had to leave the graduation ceremony early to report to their first day of work.

You've probably noticed that these examples are related to workforce development, but what's even more interesting to me is the ways that these kind of programs underscore the word "community" in our title as community colleges. These programs happen when colleges look into the neighborhoods just beyond their campus boundary and ask, "What do you need?"

Bill Ziegenhorn recently posted [a very exciting blog](#) about the connections between his history courses and various local history archives. It's a brilliant idea, but I'm new here (I have only been here five months), so I don't quite know about all of these stories and networks we have going on. Regardless, I find it all fascinating, so if you know what

Foothill has been doing for community engagement, let me know, and if you would like to see more of it, we should talk.

## **Week 7: February 28, 2015**

### **AMBIGUOUS**

*“At some point you have to consider the possibility that no one wants you to think critically – not your parents, not your government, not your church, not even your critical thinking teacher; it’s usually not in their best interests.”*

Let me set this out as precisely as I can. I grew up as an evangelical, non-charismatic, dispensational, calvinist, conservative, American christian. Oddly, though, my parents also had some kind of hippie streak, so for the first few years of my childhood we were all voluntarily homeless, living in an abandoned school bus in the woods.

Poverty. Religion. That’s my background.

So, not surprisingly, when I first walked into a college classroom, I was faced with an uncomfortable dilemma. My teacher asked the class to write an argumentative paper about this or that, and whatever it was, the teacher’s position was obvious. So I then had to decide whether I would write what I actually believed or whatever would get me an easy A.

Now, many years later, I am that teacher; and while my religion and politics have undergone complicated changes, I still can’t help it. Based on my own experiences, I am deeply sensitized to the difficulty of this student, of any student, who sits before us and must choose between speaking with their own voice or imitating ours.

They negotiate an intricate decision. They choose whether they will write for us what they think we want to hear or what they actually want to say. Yet, even if they do the former, I think there is important critical thinking at play. They are still performing a

complex analysis of audience and purpose. They ask, “What does this teacher (this reader) think and believe? How can I use that to my advantage to get the grade I want?” If a student does this, I don’t actually mind. The mystifying skill of carefully calculating this particular kind of concession will serve them well in their future.

But I still want them to go further, to do something beyond easy compromise. I want them to feel as if they are on the brink of whatever is mentally possible for them.

In my own classes, I have been trying to sneak around these sly student moves with one particular assignment – The Dialectic. It’s an essay that requires a student to write two sides of an argument so effectively, so intimately, that the reader cannot actually tell the writer’s position. The only way to do this convincingly, is for the writer to argue their own point and then momentarily arrest their own beliefs in order to pretend they believe the opposite. (In theater, I think they call this Method Acting)

What comes of it is always more interesting than a typically obedient essay. The common student responses at the end of this assignment are these:

I’ve changed my mind. I now think the opposite of what I used to. I was never aware of these other ideas or the flimsiness of my own.

I haven’t changed my mind, but I can now more effectively interrogate the other side.

I’m confused. I used to be so sure, but now I think the answers to these questions are more ambiguous.

Our students need to be able to disagree with us. But, just as importantly, they also need to learn how to disagree with themselves.

**Week 1: January 16, 2015**

The Check Writer

I work as an Enrollment Services Specialist in the Admissions and Records office, in conjunction with the Cashier's office at Foothill College. Everyday, students filter through the A&R or Cashiering phone lines, emails, or lobby lines with questions regarding how to apply to Foothill, register and pay for classes, meet with an academic counselor, take placement tests, get financial aid, get a photo ID, obtain add codes from an instructor, get tutoring for coursework, drop classes, order a transcript, transfer to a four-year college, navigate the Foothill website and My Portal, contact instructors during office hours, clear a prerequisite, find out what books are required for their classes, find a syllabus for an online class before the class starts.....and on.....and on.

Seems like a lot but this is only a sliver of the questions we get, and it is our goal to guide and prepare these students to be, well students, before they even step foot into the classroom. For many students, this is their first time on a college campus, away from mom and dad, responsible for their own successes and failures, and the vast majority of them need help but don't yet know how to seek it.

Having worked in customer service since I was fifteen (this is the part where you assume that this was long ago, without me actually saying how long ago it was), I have seen and heard some pretty astounding things and met many memorable people. These people have resonated with me, popping into my mind on apt occasions, but also randomly throughout the years. Sometimes the effects people have on you become a sort of mental shadow, renting out space in your cognitive realm of function without ever coming up with the rent check. Perhaps, unknowingly, they have reimbursed me for my time and effort with their insights, perspectives, challenges, and stories. Come to think of it, I owe them. In any case, I will incorporate the stories behind the lessons I learned with each corresponding post about my interactions with Foothill College students.

Throughout my posts I will introduce the Check Writer, the Two Dollar Bill Collector, the Veggie Wizard, the Hopeful Single, the Bearded Onion Eater, the Cat Savior, and the Short Storm. All of these people from my past jobs have challenged me to harness my ability to be patient, empathetic, and *actually hear* what they were saying to me and see *them* when it seemed they really needed acknowledgement. Only then could I truly understand the scale of the issues that these individuals faced on a daily basis. The skills I learned while interacting with these, and many more, people are sharpened everyday by interacting with prospective and current Foothill College students.

During his 2011 TED Talk, sound expert and consultant Julian Treasure wittingly turned the word *rasa* (Sanskrit for “juice”, or “essence”) into an acronym easy enough for all of us to remember when we find ourselves struggling to listen effectively to others:

**Receive-** Pay attention to the speaker when they talk to you

**Appreciate-** Respond with audible noises like “Hmm” or “Ok”

**Summarize-** Repeat what you think you heard the speaker say

**Ask-** Ask the speaker questions about what they said

(Julian’s entire 2011 TED Talk, along with links to other interesting and helpful bits of information are located in the Menu tabs. Enjoy!)

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## **The Check Writer**

Every week, a long time customer to the community bank I worked for would park her giant Buick and slowly make her way into the branch lobby. She would wait for me to finish up with any customers I was already helping, standing off to the side so she didn’t impose on anyone else’s space. A tiny, hunched over woman with hair like a dandelion blossom ready to blow away on the breeze, typically wrapped in a pastel pantsuit ensemble and festooned in broaches.

Once free, I would take her to an empty desk in the bank lobby and we would begin the process of thumbing through the carbon copies of every purchase she had made since our last meeting. She would tell me how stressful it was when she tore out more than

one check-throwing off the numerical order of things, companies taking forever to cash her checks, or worse yet, a check getting lost in the mail. We had already switched her bank account number for exactly this reason. One day I asked her why she didn't just switch to using an ATM/Debit card to make purchases and set up an automatic bill payment for her repeating monthly debits. She just stared at me, with a tense face, and told me in a very deliberate but shaky tone that her son did not come to visit her anymore. Maybe sometimes when he needed money, but not often. She said some days she would just sit on the edge of her bed and think about all of her friends that had passed away, that she was one of the few remaining in her social sphere. Some days she wouldn't even speak out loud, as there was no one but her to hear it. Her doctor visits, bank trips, pharmacy pick-ups, grocery outings, and so on were her social and psychological stimulus.

I thought about the couple of times I had rushed our check balancing sessions on account of the workload I knew was waiting for me once we were done, and I felt *extremely* guilty. From that day on, when she came in, I would give her every second that I could, make as much eye contact as possible, update her on my life events and ask her about the events in her life. When she passed away, I felt honored to have been one of her people while I could be. Foothill College students, like every other person on this planet, are dealing with the complexities of being human and all the stresses that come along with having emotional needs. I think about my hunched, patient lady whenever a student repeatedly comes in person to make a payment, register for or drop classes ( things they could easily do in their My Portal account), or ask a question that I could swear they've asked me before. You never know what someone might share with you if you pay attention or why they seem to need your acknowledgment.



**Week 2: January 26, 2015**

### [The Two Dollar Bill Collector](#)

Acknowledgement is a tricky thing. Once you observe and perceive a stimulus you cannot undo the chain of events that follows as your brain rushes to find a home in your neural network for this new information. Then, once all known associations with previously existing information have been made to the new influx of data, you can decide what you want to do (if anything) about it- but you cannot choose to just immediately unlearn what you now know. So, after noticing that a student seems to have a lot of questions, it is hard for me to not dig a little deeper to find out what's going on with them that they should find themselves so lost and overwhelmed.

Often, students flow in and out of Admissions and Records with a variety of questions that are easy enough to answer, but they often lead to other questions that students don't even know they need to ask yet. Most students, however, are busily flying through their day and have probably had 'Go to the Admissions and Records office to ask about \*fill in the blank\*' on a to-do list for over a week and just happened to remember because they were walking by our office on the way to the sweet, sweet freedom of getting into their car and driving home after class.

The look of slow building panic on a student's face as they realize the quick question they came in with is being answered by a multi-faceted answer detailing policies and procedures is a daily scene for me ( I recognize this face as I imagine it is the one I make as the CVS Pharmacy employee goes into a disturbing amount of detail about the company's reward program when really I just wanted to know if my phone number was registered). For example, a simple question spawning from fees assessed on a student's account that they don't want to pay can morph into a discussion about any and all of the following:

Where to find and how to interpret class deadlines in

...or how to log into MyPortal.

How to read the class schedule online so that prerequisites and co-requisites are clear, followed by how to clear a prerequisite or file a course substitution. Emphasizing that these procedures take time to process and planning early and being organized makes life 'not suck'.

Finding the GE, IGETC, degree and certificate worksheets online so that the student is familiar with the basics prior to meeting with a counselor so they get the most out of their 30 minute appointments.

Knowing where the PSME Center is and how to go about getting help with tutoring.

Etc.

Although many students find these interactions helpful, it seems than many more are too busy, too tired, too overwhelmed, or just too saturated with people talking at them to stay and listen-even after they have stated they need to know whatever it is you're trying to tell them. Herein lies the trickiness for staff and students: deciding to commit to the interaction for the sake of doing our jobs as staff and doing their jobs as responsible students when there is no guarantee of success but definite depletion of time and energy. It is in moments like this that I think about the Two Dollar Bill Collector.

Years ago, working at the same bank that The Check Writer mentioned in my previous post came to, a man would come in once a week to deposit small amounts of cash. The tellers that I worked with warned me that this customer was 'really creepy', always looking at the counter or their hands when they tried to have a conversation with him, and mumbled things under his breath in response to questions they asked him. 'Creepy' seemed an extreme label to give someone who sounded, by my coworker's own description, like someone who just didn't like eye contact and had social anxiety. When it came time for me to help 'the creepy guy' for the first time, it was obvious he was not looking at the counter or my hands but at the cash in my drawer. To be fair, everyone who goes to the bank watches their bank teller fumble around in their cash drawer, but most people don't furrow their brow and dart their eyes from one area of the cash drawer to another. This was actually alarming, was 'creepy guy' a mastermind bank robber?

When I get nervous I start talking a lot, so I asked him how his day was going and how his weekend had been. He told me about how disappointing his visit to a coin shop over the weekend had been, he collected two dollar bills and the coin shop didn't have any for sale. The coin shop he was referring to was actually a regular patron to the bank, the owner would clean out all of our two dollar bills when he came in for deposits. It dawned on me that this man, this 'creepy' and socially awkward customer, was just looking to see if we had any two dollar bills in our cash drawer. That I did. I asked him if he would like to swap any extra cash he had for the two dollar bills I had set aside for the coin shop owner. That was the day that I learned about the different markings, ink colors, years of print versus resale value, and other collectability factors associated with two dollar bills as this man was more than thrilled to take me up on my offer. He explained to me that he had collected the currency since he was a boy and was super proud of that fact, and I was happy to know that he wasn't planning on robbing me.

### **Week 3: February 2, 2015**

#### **[The Veggie Wizard](#)**

This is a long one, just a heads up.

Students do not care if a college employee is faculty, classified, admin, part-time, whatever. They see a college representative and hope that this person can assist them when they face a problem or at least point them in the right direction when they cannot. Any disagreements, past or current conflicts, and perceived shortcomings that one branch of a college holds against another branch mean nothing to a busy student. As many other bloggers have pointed out, and I strongly agree, it is everyone's responsibility to assist and guide students, no matter what our personal opinions may be of the department or person we may need to collaborate efforts with. Foothill College, like any college, is a lifeline for students to arrive at a life enriched by education and knowledge. If one area of Foothill College staff does not support and communicate

with another area, students suffer along with us. I am not so naïve in that I would wonder 'Can't we all get along?', I do, however, think we could all benefit from sharing and collaborating more across the usual faction divides to better understand one another.

My sister is a high school math teacher whose entire classroom has an I.E.P, a variety of behavioral issues and learning disabilities. She has been teaching for 14 years, and so for 14 years I have had the opportunity to peek inside the insanely busy world of an instructor to better understand the challenges they face with their students, coworkers, student services staff and administration. Despite any conflict she has had with other school representatives, her relentless goal has and always will be: engage her students, get them involved, inspire them to think outside of the usual prescribed parameters, encourage them to invest in their learning, and teach them how to forgive themselves when they fail.

While listening to her experiences I would always ask why her dean didn't understand this, or why her paraprofessional didn't do that. It seemed as though everyone was overextended and thus never really had the time to fully explain to others what it was that they needed in order to feel supported and effective. Or perhaps they did not have an audience waiting to hear it in the first place. When she did connect with her principal, dean, co-worker, etc., they always seemed to recognize that they had the same goal: student success, and could move forward feeling united in that aspiration.

## THE VEGGIE WIZARD

It would be wonderful to say that the man who became known as The Veggie Wizard was every bit as whimsical and healthy as his secretly assigned title sounds. It is easy enough to picture: a smiling, cartoonish wizard telling children to eat their vegetables so that they can grow strong and perhaps even using his staff to materialize veggies out of thin air. That vision, however, contrasts sharply from the man who in a matter of less than one week caused various factions within the Starbucks Coffee shop location I worked at to declare war on one another.

The location I worked at was in the same neighborhood as numerous halfway homes and a methadone clinic, with many patrons to these dwellings spending a large portion of their day capitalizing on the 50 cent drip coffee refills, access to air conditioning and free water, and a bathroom. For the most part, they, like everyone, would keep to themselves while noshing on a muffin or scone and sipping on a foamy latte. Standing at over 6 feet, with broad shoulders, messy dark brown hair, uncomfortably wide open eyes, and a grin that was permanently on display, the Veggie Wizard (V.W.) was a regular fixture in our store. Up until his meltdown he had been nothing more than odd and quirky, always keeping intense eye contact and grinning whether he was talking or not.

One day, the grin disappeared and he was unusually focused while sitting at a corner table unpacking his Walgreen's bag and drinking his coffee. Out of the bag came a tablecloth, vase, fresh cut flowers, and plastic plates for snacks. He took out a notepad and started scribbling away for hours. Other customers asked me to ask him to leave, that it was making them uncomfortable to have this looming man sit as his faux living room table while they tried to enjoy their Frappuccino. To their dismay, being strange was not enough for me to have V.W. pack up shop and go. The following two days went the same way, with V.W. setting up his table and scribbling in his notebook while customers and coworkers alike questioned my decision to let him stay.

This difference in opinion caused a domino effect of complaints to bounce from one shift crew to another as well as cause some regulars to avoid the store altogether. As much as I understood that V.W. made people feel uneasy, he wasn't directly harming anyone, albeit his typical demeanor was getting more erratic with each passing day. It wasn't until V.W. showed up in a dark blue wizard robe decorated with silver stars, hair more disheveled than usual, his Cheshire grin back from its vacation, and an absolutely manic speech pattern that I realized whatever V.W. had been going through that week was about to bubble over.

By then, it was too late. As he made his way around the lobby, V.W. started taking various squash and cucumbers out of the deep pockets of his robe and tossed them behind the cash register, by the bar, and out into the seating area. People gasped and a

couple WTFs could be heard coming from both the employee and customer factions. He then took wadded up pieces of journal paper out of what must have been the Mary Poppins bag of pockets and dumped them on the condiment bar. In less than sixty seconds, he unloaded his week's worth of scribbles along with the season's bounty of garden goodness, and just as abruptly, he left the store. The journal pages had disturbing drawings of creatures with devil horns and random words sprawled across the pages like 'See!' and 'Never'.

I had been so focused on making sure V.W. was not being treated unfairly due to his strange but typically harmless nature, that I dismissed other people's points of view and observations. Granted, many of them came from a place of basic annoyance, but many also came from observations they had that I did not. I wasn't sitting out in the lobby with him like the customers were and thus did not hear V.W. mumbling and giggling to himself. Additionally, I did not know it at the time but a couple of my coworkers had family members who had gone through rehab and jail time due to heavy drug use. Seeing V.W. had brought back old feelings of anger and sadness. For those couple of days, our store was tense, unorganized, and emitted an atmosphere of discontent that drove customers away and put employees in an unstable work environment.

The Veggie Wizard, in all his projectile produce glory, taught me to put my own opinions aside so that I could take in the observations and input of those around me to come to a collective conclusion.

**Week 4: February 9, 2015**

### [The Hopeful Single](#)

Without fail, returning students who are older than most of the college students surrounding them will inject some sort of statement into our conversations that hint at their anxiety or embarrassment. Usually, by sharing my own story of the unconventionally traveled path I called home for quite some time they seem to feel as

though there is at least one more person aside from themselves on campus that has experienced what they're feeling. They aren't weird, they aren't failures, and they certainly have nothing to be ashamed of for pursuing their goals in a timeframe and pattern that differs from others around them.

Last week a returning student came into the Admissions and Records office to verify whether or not he completed his AA degree back in the late 80s at Foothill. It turned out that he hadn't but was shy by just a few courses. The man indicated that his son attends Foothill and had been encouraging him to get back into school ever since noticing on his father's 'things to do in 2015' list that completing his AA degree was in the top five. I asked him if he was interested in reapplying to the college for the upcoming Spring quarter so that he could work with an academic counselor in creating a sort of 'getting back into school' plan. We sat together while he completed his application online, allowing for each section of the application to become an opportunity for me to learn more about him: the high school he graduated from, colleges he had attended, years of service in the military, volunteer work he does in his community, and so on. By the time his application was submitted, he was pretty pumped up about being one step closer to crossing an important to-do item off his list.

The excitement of being aware of and harnessing your potential to grow from your endeavors, in spite of the roadblocks that inevitably pop up, is an invigorating elixir. I have met numerous returning students that are facing challenges outside of school that include (but of course are not limited to): divorce and child custody hearings, restraining orders, serious illness, job insecurity, caring for a disabled or ill family member, and the recent death of a loved one. They actually share this with us when we ask them how their quarter is going, I suspect the neutrality of our presence in their lives helps with this though. In any case, numerous Foothill College students are pushing themselves through the storm that life is enveloping them in, and taking one step at a time towards their degree or transfer goals. I, for one, am extremely inspired by them.

THE HOPEFUL SINGLE

While attending SJSU, I worked part-time as a gymnastics and recreation instructor for 2-8 year-olds throughout the south bay area. My shifts would take me from upscale private pre-schools to daycares inside people's homes. Sort of all over the map, with all types of people working in these centers. One day as I was rushing to load up soccer balls and goal nets into my car, a daycare worker ran over to show me a text message on her phone. This was someone who I would wave to every week but had never actually talked to, so when she came running over I was not sure what to expect. It turned out that she was originally from Pakistan and had just recently signed up for an online dating website. She had hoped that I, being an American female, could 'decode' the text she received from 'this American guy' she had met online.

The text read something along the lines of 'Had fun hiking with you, looking forward to our next adventure'. I thought to myself, well, she didn't get murdered during her first date with this guy that she had just met as they hiked through the wilderness, so that is a good sign. Other than that it just seemed as though he, well, had fun hiking with her and was looking forward to their next adventure. She was wholly disappointed in my inability to speak American male and was further discouraged that I had never used an online dating service. Nevertheless, every week she would wait for me to wrap up the somersaults, hockey or just plain running after children as they mutinied against me to show me recent text messages. Their relationship was blossoming and she seemed hopeful that the potential she saw in this phantom writer (as I grew to know him) would lead to something more.

**Week 5: February 19, 2015**

### [The Bearded Onion Eater](#)

The Bearded Onion Eater (B.O.E) is most likely no longer with us today, which would mean the world has one less wildly enthusiastic participant in all things challenging on an olfactory level. Every other Friday, B.O.E. would signify his presence in line



vicariously through those around him with a symphony of throat clearings, loud sighs, and shuffling feet as people attempted to discreetly distance themselves. It wasn't the fact that he was shirtless, shiny and tanned with flabs of skin hanging in defiance to his emaciated frame. It wasn't the unruly, long white Gandolph beard and Einstein-like hair either that activated the parting of the crowd. B.O.E.'s snack of choice, a raw peeled white onion- devoured as though it were a crisp apple, created an invisible force field that promised him ample standing room in a long line at the bank.

What does a homeless man who looked like Merlin on meth have to do with student services? He was a challenge, albeit on a physiological level, but a challenge nonetheless. The man just wanted to withdraw his bi-monthly government controlled rehabilitation disbursements and be on his way, free to continue on the adventures he had the people who 'lived in' his beard. Easy enough. For me, however, this was a challenge. As soon as he hit the glass double doors of the bank my co-workers were nowhere to be found. They might as well have been abducted by aliens as not even the FBI would have located them at that moment. With a deep breath, I would call B.O.E. to my window and attempt to hold the Guinness world record in 'most shallow breaths taken over a five minute time span without passing out while simultaneously holding a conversation with a man who is biting into a raw onion, chewing it, and updating you on the latest adventures he has had with his 'beard people'.

As offensive to my senses as these transactions were, I kept it in perspective: there was no valid reason to have an attitude with this man, to refuse to help him, or to feel as though he was intentionally putting me on edge with what was and still is literally something that will make me cry. This is what I think about sometimes when students scream from the other end of the phone at me about their outstanding balance, their teacher that dropped them even though they did the assignments, their parking citation that was issued despite the fact that their permit had only expired one day before, and on and on for all of eternity. I think about the fact that I was able to keep my focus and perspective while providing respectful service to a person who sprayed onion juice at me while he happily shared moments from his day.

With most students that I talk to whose balance cannot be reversed, or registration in a class be reinstated, or deadline magically be met, I ask what their next step is. This typically catches them off-guard as they have unloaded onto me an arsenal of accusations and insults about the college, its staff, and its policies only to find that they, the sole cause of their predicament, are not being shut down because of their battle cries. Instead, I have found that it is more worthwhile to walk them through our website, point out important pages and links, and email instructional PDFs so that they can access a how-to guide whenever they need to. Foothill College students face an overwhelming amount of distractions, challenges, and pressures and would be disenfranchised by my lack of interest in providing information or instruction when I face my own distractions, challenges, and pressures. They are a challenge, worthwhile and promising, but most of all thankful for the opportunity to be heard.

## **Week 6: February 23, 2015**

### [The Cat Savior](#)

I see within those around me an unwavering yearning to be a part of something greater than oneself, to persevere in even the most difficult of times. Students I work with juggle the academic tasks assigned to them with an anxious determination. They calculate to the closest decimal exactly how well they will have to do on their final now that midterms have come and gone. One student shared that during her midterm she was relieved to find that after having carefully worked through each problem, her answers were one of the multiple choice options. She failed the midterm. With the amount of studying, tutoring sessions, and coursework from her other classes (not to mention the other obligations that come with being alive outside of school) this student had numerous reasons to feel overwhelmed.

She chose, however, to plan accordingly in order to accommodate the extra time needed for her tutoring sessions and rescheduled everything else that could be shifted.

As she told me all of this, she was laughing- not because she lacked a clear understanding of the amount of work that was waiting for her- she laughed because she knew that this is sometimes how life is. In order to continue forward, you push harder, approach your schedule with a logistical precision, and share your struggles with a compassionate listener so as not to explode from the busy whirlwind of thoughts and feelings seething inside.

She is one of many, many people on our campus that are pushing forward: students, faculty, staff and student services, administration, central services, health services, etc. Without knowing one another's stories, the paths that led us to Foothill College, and the goals that each one of us harbor it is easy to feel isolated in our struggle to accomplish and overcome. With the highly competitive social atmospheres that can become our work and classrooms, it seems easier if not safer to keep the story of how we came to be together on this campus to ourselves. I can't help but feel that by nurturing this hesitation we all end up missing out on something that really is greater than any one of us could convey on our own-a real connection.

### **The Cat Savior**

Working in a veterinary hospital requires more training of how to handle owners than animals. Animals don't care if you are ready to know that they are nervous, scared, angry, or ill, when they are ready to show you these symptoms and reactions, they do. People on the other hand slosh around in the turmoil that is the pros and cons of disclosing feelings, I mean what will everyone think? Every week, the Cat Savior (C.S.) would call to verify how many cats she would be able to bring in for spaying, neutering, vaccinations, random surgeries or illnesses and so on. She wanted to make each trip to the hospital as productive and efficient as possible. While waiting for her appointments, C.S. would chew on her bottom lip, flick her fingernails against her thumbs, and let out long sighs. The woman was visibly and audibly stressed.

Finding a spot in our already busy schedule was always a challenge for these rescue cats, but the staff made miracles happen by working through lunches and staying well beyond closing time. One day I asked the veterinarian what the story was with C.S.,

where were all of these cats coming from? Apparently, C.S. had been somewhat of a normal person with a normal job before starting a small time cat sanctuary for shelter cats that would otherwise have been euthanized. This endeavor was supposed to have been a rewarding job on the side of her already established life. As word spread, one by one boxes of kittens, sick or injured cats, or seemingly well cared for cats abandoned in their pet carrier started to become the usual anonymous delivery to her property.

Before she knew it, upwards of 30 cats at any given time were counting on her and her volunteer staff to get them veterinary care, solicit organizations for donations, organize adoption fairs, and hopefully find a forever home for each one. C.S. still had her full-time job that consumed her 8-5 shift, and then went home to the never ending shift of saving cats.

I thought about C.S. often while I was a student at Foothill, listlessly climbing the stairs to my early morning Math 10 class. I would think of her while having little pity parties in my mind about how tired I was, how much studying I had to do, or whether or not I would transfer on time. If C.S. could single handedly build a cat sanctuary from the ground up, recruit volunteers, solicit donations and use all of her free time to drive cats to and from what ended being almost every veterinary hospital in town- I could muster enthusiasm for what did and did not constitute statistical significance.

**Week 7: March 3, 2015**

### [The Short Storm](#)

Working as an enrollment services specialist in A&R with a focus on cashiering issues pulls me in multiple directions most days, and whirls me around in a hurricane on other days. Today was somewhat of a tropical storm, challenging enough to put me into survival mode but not so chaotic that I needed to go into full barbarian mode-losing all sense of courtesy to people I interacted with. Over 800 students received an email today informing them that they have had a cashiering hold placed on their account for

an outstanding balance. Until their balance is paid in full, they cannot register for courses, view their grades in their MyPortal account, or access an official transcript. Priority registration for the Spring 2015 quarter begins on Thursday and the contact number listed in that email is my direct line. Yeah...

Even though it happens on a daily basis, I still find myself surprised at the number of students who have taken out loans or received Pell Grants and Board of Governor's fee waivers that do not understand the implications attached to these funds. Additionally, many students just never pay and then want to know why we want our money. Many drop their classes after they have had financial aid disbursed to them and are horrified to learn that they will have to pay that money back. I have heard some pretty strange and sometimes comical reasons that these funds were already spent, but most of the time it is really just an ignorance towards fiduciary responsibility that lands these students in such a pickle. Who is to blame really? Some of these students are the first person in their family to go to college, some are second language learners rushing through the registration process in order to get the classes they need, some were not reading the fine print on our website- perhaps they are so young that they have not had exposure to the world that lies in reading between the lines, and some just don't pay attention or read their emails. I suppose we can blame the email evaders.

In any case, college is expensive-even at the community college level-for most students and many have had little to no exposure to being financially responsible for the decisions they make. I spent ten minutes today explaining to a student what a collections agency is, why their credit score is important, and what future endeavors (leasing a home or apartment, contracts for cell phones, applying for lines of credit or loans, etc.) could be negatively affected by having a low credit score. No, it is not in my job description to explain these things, but it is the right thing to do and for those students who would ask or be willing to sit through my 'Getting your life together is important' speech, I will find the time. Some students respond with 'It isn't fair', 'That is too much to read', 'No one has time for that', and so on and are typically silenced by my disclosure of just having finished my Bachelors degree: yes it was hard, yes I had to scour university web pages for information regarding my specific questions, yes it was

like an additional assignment familiarizing myself with the policies and procedures that pertained to me, but none of that was unfair and you do it because you are your own keeper. You do it because it needs to be done. It was raining outside today and storming inside the thick concrete walls of the student services building as well, an apt atmosphere for the introduction to the Short Storm (S.S.).

Short Storm is likely 8-years old at this point, but when I knew him he was six- not five and not four anymore-as he liked to announce. S.S. liked to interrupt the gymnastic classes I taught for children by jumping into the middle of the group and either throwing equipment across the room, smacking other kids as they rolled through somersaults, or just proclaiming that what we were doing was 'stupid and boring'. After sharing some challenging experiences with my sister, a parent and a teacher, I was given the golden ticket that all people who do not have children HAVE TO know: children love to be your helper, it is their goal in life, they will do almost anything if they do not know that you want them to do it and think that it is their own idea. Score. I was ready to invoke the power of this holy grail the next time S.S. wanted to flick boogers or run around kicking my equipment while simultaneously conducting a symphony of fart noises. I was ready to use this secret weapon and it was not long before S.S. gave me the opportunity.

In the middle of a class one of the children needed to use the bathroom. This entailed gathering 10 children, ages 5-7 years-old, and forming a line to walk through hallway after hallway of a gigantic church to the children's bathroom. As the children spilled into the bathroom, S.S. kept going, bursting into a full speed sprint around the corner and down some stairs. I imagined in that split second the lawsuit that awaited me as this child was sure to trip and break every bone in his body, one step at a time. Not sure if I should leave all of the other children alone in the bathroom to plug up sinks with toilet paper or chase after S.S., I remembered my sister's advice. I called out to S.S., saying I was hoping he could help me make sure everyone washed their hands after using the restroom and that I didn't know what activity (lie) to do when we got back to our room- perhaps he could help me? Like a spirit materializing out of thin air, there he was. Sucker, unbroken and intact, sucker. Sometimes, when you are pulled in too many

directions you have to get creative and think on your feet. Leave it to a six year-old to put the fear of god, Buddha-whomever, into you.

**Week 1: January 19, 2015**

**On-line Teaching, Reflections #1**

This quarter I am teaching four classes, three of those are on-line. So, for this blog project, I am interested in reflecting about on-line teaching. How do we translate what we do in the face-to-face environment to the online arena? Do teaching practices translate or does on-line instruction require its own pedagogy? How has the ETUDES platform shaped my understanding of what on-line teaching is? And for that matter, do technological enhancements such as Voice Thread, personal ETUDES videos and Salon.com provide innovation or merely allow us to transpose what it is we do in the classroom?

Clearly this is an exciting time. On-line instruction seems miles apart from the old chalk-and-talk mode of delivery. But then we are still engaged in fostering learning, and human nature is still what it is. So what is different? Take for example the late add situation. In contrast to the face-to-face class, I have a disproportionate number of students who request late-adds for on-line courses. Many who I send add codes to, do not register. What does that say about the commitment as students feels to a particular class? It appears that the commitment to the course is more tenuous than if the student has had a face-to-face interaction with the instructor. The same goes for initial drops for the course. In the on-line environment, more students drop initially than in the face-to-face classes. What are the pedagogical implications of this?

Of course, we can respond to this last questions with reflections on students expectations (seeking easy classes), the rigor of other on-line classes (perhaps less so) and the quality of my own course, but perhaps the issue of tenuous commitment needs to be addressed. Why do students continue in face-to-face classes past the first day? What percentage is affective, and what percentage is cognitive? I address the second part explicitly in the first module, but I think I could do more to project who I am as a teacher. This week, Patricia Crespo-Martin from the Spanish Department has graciously



agreed to teach me how to create short videos, so I'll have those in place for the next time I teach an on-line course. I might just have hit on the topic of that video, "Why you should take this course!" Then of course there is the issue of how to verify that such a video does make a difference. And who is to say that it will only have a positive influence? ;)

**Week 2: January 25, 2015**

### Rules of Engagement

Writing the blog has spurred some off-line discussion with colleagues; an unexpected plus to writing this blog. One issue that came up was the fact that the 'rules of engagement' seem to be less clear. In other words, the tone some students use when communicating with their instructors is far less measured than in face-to-face interactions. Of course there are ways to address this by providing 'netiquette' instructions, but I wonder what this display of negativity says about the inter-personal expectations among our on-line identities. If I only interact with you on-line, how do I perceive myself? Am I bound to the same standards of my moral code? It appears that slight differences exist. I asked a colleague if she would get over a 'bad class' easier in a face-to-face course or in an on-line course. To make it more specific; is it harder to forgive oneself for disappointing students' expectations in an in-class or on-line environment. Of course, everyone is different, but at least between my colleague and I, we agreed disappointing people in person was harder. Is it easier to be rude in person or on-line? You get the point. So this leads me back to the notion of commitment that I spoke to in the blog contribution last week. Perhaps commitment faces challenges not only on the student's side but also on the teacher's.

And on the topic of on-line identity; Peter Drucker (ironically not only an educator but also the founder of the 'modern management' principle) once observed, "Teaching is the only major occupation of man for which we have not yet developed tools that make

an average person capable of competence and performance. In teaching we rely on 'naturals', the ones who somehow know how to teach." Does that extent to on-line teaching in the same way? I do consider myself a natural teacher. The first time a stepped in front of a class, I felt like a fish released into water. But it is the dynamic of standing in front of a class that allows me to connect to that feeling of joy and ease and, yes, competence. Staring at the ETUDES interface is a different matter. I do not feel like a 'natural' teacher on-line. I feel like that average person described by Drucker trying to develop the tools "of competence and performance". How's that for a change in the 'rules of engagement'? My own engagement that is.

**Week 3: February 2, 2015**

### [Authentic Communication Or How to Embody the Essential Disposition](#)

To continue my thoughts from last week, I'd like to narrow in on a particular aspect of teaching; not necessarily a skill or strategy, but the embodiment of a disposition that fosters intellectual curiosity. In my opinion, the transmission of this disposition is key to successful teaching whether face-to-face or online. However, the transmission of this disposition is vastly different in those two environments. How do you 'read' an on-line class? How can you use your emotional intelligence to adjust to the needs of a particular group of students?

What actually precedes this question is the issue of whether an on-line class is a coherent group. As an on-line instructor, are you teaching a class/group or do you more or less engage in one-on-one relationships with on-line students? What efforts go into community building in the on-line setting? The answer for my current on-line teaching model is the Postings/Discussions. Every quarter I conduct my own student evaluation, which serves as the last mandatory posting activity. Instead of posting in the forum, students send me a private message with their responses. (As a side note here, I

allow the students an 'out' by offering an alternative assignment, but so far no one as opted for the later.) Without fail, students like this activity the best because it allows them to connect to their classmates. Clearly there is a desire on the students' part for the group or community experience.

I respond to the group discussion by summarizing trends and topics that gained a lot of traction. I feel that in my response to the discussion, I can transmit the particular disposition that I spoke of earlier. I model critical engagement that strays from the obvious answers and approaches, but I am also able to 'pick up' my students where they actually are. Particularly in the choice of examples (usually artworks that in one way or another comment on the question/problem at hand), I am able to make a connection. Needless to say, this type of work requires an enormous amount of attention on my part. Apart from feedback on assessments, this takes the most time while teaching the course. Yet it is here that I engage in authentic communication with the course as a group, and where the transmission of disposition is the most direct. Jose Nava told me that he recaps each week the work that took place. I can see this as another means of authentic communication and an opportunity to connect with the class as a group. At this point, I cannot see doing both due to time limitations, but, I believe Kathryn Maurer has her students summarize discussions, so that might be a way to 'free' up some time for me to respond to the class with weekly summaries thus creating a greater aggregate or presence of the disposition.

**Week 4: February 9, 2015**

### [In On-line Teaching, Does Size Matter?](#)

Kurt Hueg, Dean of BSS, attended the vendor demos for the selection of a common on-line course management system for all California Community Colleges in Sacramento last week. In an e-mail to the faculty in our division entitled, "Notes from Sacramento", Kurt writes, "I cringe when I hear about students taking four or five unit online courses

on smart phones. How could that possibly be a recipe for success?" I share Kurt's incredulousness; in fact, this piece of information stopped me cold in my tracks.

I spend a substantial amount of time on the presentation of my lecture information. Since much of what I talk about touches upon art, I upload numerous images, and 'chunk' my lectures to aid in the visual appeal. However, I create my lectures on a desktop computer and have been envisioning my students to read the lecture on a screen similar in size. But now it is "Honey, I shrunk your lecture!" to 3.5 x 2 inches on the i-phone 5 screen. Yes, there is the i-phone 6+, but even that screen size makes me feel my work is relegated to miniature realms of insignificance.

Kurt further writes, "We can't control what technology students use to access online courses," and my hunch is that commercial interests will force any course management system to offer access on as many platforms as there are to consume content. And here is another shift: I expect my students to 'read' the lecture on devices that allow consumption of popular culture. In a face-to-face course, students enter a space different from every day life. We speak of classrooms as 'learning environments', and we dedicate significant resources to the design, construction and maintenance of them in order to enhance the learning experience. We carve out a space dedicated to teaching and learning, and thereby attribute value to it. For community colleges, it is the State and ultimately the taxpayers that attach enough value to education to fund the creation of a separate space designated solely for the purpose of education. What does it say about the value of education if the lecture, lesson or course shares the exact same space as Candy Crush? Would we as teachers feel empowered teaching in an arcade rather than a classroom? What effect would this have on the learning experience? Does this matter?

**Week 5: February 23, 2015**

### [The Instructor's Voice](#)

The BSS Division is currently in the process of defining its own standards for on-line teaching that are more specific to the types of courses taught in BSS. After defining the quality and amount of contact expected of on-line instructors, the committee is now grappling with the issue of instructor generated content. We concluded that 'the content must be driven by the instructor's voice', meaning that the posting of a publisher's power point or the collage of material generated by others does not suffice. After all, in our lecture courses, do we not make sense of the material we present by telling a story, whose parts, like serialized novels during the 19th century, chop the material into contiguous, hopefully riveting installments to maximize student retention. In a way then, the sum of our lectures is like *The Three Musketeers* or *The Count of Monte Cristo* – both novels that first appeared as serialized novels, and the later according to Wikipedia ([http://en.wikipedia.org/wiki/Serial\\_%28literature%29](http://en.wikipedia.org/wiki/Serial_%28literature%29)) “stretched out into 139 installments”. But whereas the lectures in the brick-and-mortar classroom dissipate into the ether, the Modules in ETUDES make these installments more conspicuous as part of a whole.

The comparison here to the serialized novel is not as far-fetched as it may seem. First, newspapers are items with an expiration date (lining the proverbial birdcage within days of its publication), just like the relatively short-lived existence of the ETUDES course site. Secondly, to quote the aforementioned Wikipedia page, “At that time, books remained a premium item, so to reduce the price and expand the market, publishers produced large works in lower-cost instalments [sic!].” Ah, yes, might we consider education a premium item whose on-line delivery reduces its cost and expands the market? Obviously, but what is troubling here is that writers like Alexandre Dumas, Charles Dickens, Leo Tolstoy and Harriet Beecher Stowe responded to the new method of content delivery by writing longer stories. In other words, the medium of delivery drove writers to change the way they told their stories. So what does that say about our

lectures on-line and those that we present in class? What changes do we make to the format and content of the story that we tell in class and on-line?

For once, my lectures on-line are shorter than those in-class partially because I write my lectures. I've been trained to write, so somewhat that part does not only come easy, it allows me to polish the story that I want to tell to a greater luster than I could ever achieve talking off the cuff in class. But then, this text-based delivery does not do justice to all the possibilities and opportunities that the on-line delivery of content provides. The medium is built for more than text, and I wish I had the time to not only learn the nuts and bolts of different software that allow me to deliver instructor generated content in a non-text based fashion, but I'd also like to have the time for trial and error away from the scrutiny of my students. In class, it is easier to take risks since one can assess success more immediately. In an on-line class it becomes harder to come back from having bombed since feedback – if it is given at all – is delayed. Did those 19th century writers cater more to their audiences' taste when the novel debut was delivered in lucrative installments in the newspapers? Is the instructor's voice identical to the one she uses when she delivers her lectures?

**Week 6: February 26, 2015**

### [Moving Forward](#)

Today I attended a webinar on OEI, the Online Education Initiative entitled “Moving Forward with the Online Education Initiative” and conducted by Pat James Hanz, the Executive Director. I was impressed. The big draw for this talk was background on why Canvas was chosen as the statewide platform for Community Colleges (user-friendliness or student-friendliness being the main reason), but I got very excited about the potential for high-quality support services for online teaching. These services include: assessment for on-line student readiness, on-line student tutoring, exam proctoring and on-line counseling. On-line teaching is gaining more of a defined status;

the recognition that the on-line environment is different from that in the face-to-face classes. These efforts directed at on-line teaching and learning are prone to codify what defines this new model of teaching and learning, and I bet that once these structures are in place, the particularities to this new territory we are charting will become clearer.

Sure, much of the talk is still about accessibility, a faster pathway to graduation, and the possibility for students to access courses filled or not offered at their home institutions to take on-line at other colleges. And sure, the community colleges are a perfect fit for such a system. It is somewhat inconceivable that UC Berkeley would grant credit for students taking Stanford courses, but then we, the community colleges are not hampered by rivalries fueled by sports teams and novel prize wins by graduates (UC Berkeley 30 – Stanford 10, but then Stanford has only half as many students, sorry, I digress). Yes, on-line education is anything but elitist education, and if elite institutions offer their courses on-line than these become MOOCs (massive open online courses,) aimed at unlimited participation and with a for-profit agenda. I think it is here that community colleges really can make their mark. Our 'product' if you will is not primarily content driven, but aggregated with concerns about student success, retention and course-to-course persistence.

But here is what I am worried about. With this one-for-all-approach, will we make the right mistakes? Will risk and failure be embraced, or are the stakes too high to allow for experimentation? How will the format of Canvas shape the face of on-line learning? What are the effects on innovation for educational platform builders if competition among community colleges is limited? Yes, the benefits for the educational opportunities for our students are enormous, and this is a strong reason to push onward with this. As long as we remember that when it comes to on-line teaching, we are not 21st century aerospace engineers but more like second or third generation Wright brothers.

**Week 1: January 18, 2015**

### Student Surveys

This week I received some student surveys that were done at the end of last quarter. The feedback was for the three courses that I teach in the dental hygiene program during fall. For accreditation of our program, I am required to do some self-reflection on my SLOs and the student comments from the surveys. I am always happy to get feedback from my peers and my students because it helps me to grow as an instructor and guides me in making changes in my courses to promote better student learning and success. Creating an environment both in the classroom and the clinic that will enhance student understanding is important to the success of the students. In the past I have felt that I must try to incorporate every suggestion. Through the self-reflection this past week, I realized that it is not always possible or even realistic to have this as a goal. It is important to consider each suggestion or request and then decide if it will truly enhance learning for all students before making changes in the course structure.

One comment made by a student regarding my clinical dental hygiene course was her frustration at differences between clinical faculty. In clinic students provide dental hygiene care to their patients and are assigned a different faculty member each day who will supervise their work. As clinic coordinator it is my responsibility to calibrate instructors so that we are all grading and evaluating students the same way. This is not an easy thing to do because each person has had different educational and professional experiences and opinions. I've organized one faculty calibration session at the start of fall quarter where we discussed several clinical procedures and how to implement them. I've learned that one session is not enough though and that follow up is needed for both faculty and students to ensure understanding of the changes.

I want to create some hands-on materials that would be available during clinic that faculty and students can use for calibration exercises. One thing that tends to be more varied in clinic is the classification of dental calculus that is present on a patient's teeth.



The amount of calculus present can indicate the severity of the patient's oral condition and is factored into the credit given to the patient upon completion of the patient's dental hygiene care. Classifying calculus can vary greatly from instructor to instructor. I have just gotten some typodonts (models of teeth) and I plan to create "fake" calculus and apply it to the teeth so that it mimics the clinic's calculus classification system. This way students and faculty can check the typodonts if they have questions about how much calculus is found on patients' teeth and arrive at similar conclusions. I hope that this will help to alleviate some of the students' frustration with this aspect of dental hygiene care. I think that this will enhance learning in the clinic too.

On the other hand, I had a comment from another student regarding clinic seminar which meets once a week to review clinic procedures and discuss concerns related to clinic. Seminar is scheduled for 50 minutes just before morning clinic. The student felt that as the time got closer to the start of clinic, he/she started to zone out and thought about what was planned for the clinic session that morning. The suggestion was to have clinic seminar at a different time or on a different day of the week. This is a valid suggestion but after reviewing the schedule of classes for the 2nd year students, it was not possible to move the course. I felt bad about not being able to accommodate this suggestion but decided that I couldn't do much about it. I did discuss it with the students and we came to conclusion that if they had their dental units set up the afternoon before, then they would be less stressed during seminar. It wasn't the solution that was requested but a good compromise. This will also help the students learn and grow as dental hygienists. It also showed me that as an instructor I can't always meet every suggestion and request that might be made of me but that I should always be open-minded about them and see what happens.

**Week 2: January 25, 2015**

## [Bachelor's Degrees at Community Colleges](#)

Week 2 of the writing challenge...I thought that I might have trouble finding things to write about but not so far!

Last September, Gov Jerry Brown signed SB850 into law. This bill will create a pilot program in California which will study the impact of community colleges offering Bachelor degrees in certain high-demand careers. Our own Chancellor, Dr. Linda Thor, has been a champion of this idea for many years. As a result of this bill, the 112 community colleges in California were able to apply to be considered for this pilot study. Each community college district was able to recommend one program only. The dental hygiene program at Foothill College was recommended from our district and our program director worked very hard to submit an exceptional application. One of the parameters for the program being considered was that it did not conflict with similar programs at the local CSU or UC campuses. Fortunately, neither university system offers a Bachelor's degree in Dental Hygiene in Northern California.

Just last Tuesday our division dean gave us the great news. Our program was selected as one of the 15 programs in California that will be allowed to offer a bachelor's degree at the community college level. It is very exciting both for Foothill College and for our students. I received my bachelor's in dental hygiene from UCSF back in 1986. I actually spent more than 2 years as a student here at Foothill College completing my general education requirements and prerequisites for the dental hygiene program at UCSF. Once accepted to UCSF, I had two years of dental hygiene education to complete my degree. The students in the dental hygiene program at Foothill spend a similar amount of time to complete prerequisites for our program and then 2 more years in the program to complete an AS degree in dental hygiene. I'm thrilled that our students will now be able to receive a college degree that truly reflects the amount of time and effort that goes into completing our program. When the dental hygiene program at UCSF was closed, it was no longer possible to obtain a bachelor's degree in dental hygiene at a

public university. The only bachelor's degree programs were at private universities and proprietary colleges with considerable expense and incurrence of debt by students. Now with the passage of this bill and the acceptance of our dental hygiene program and another dental hygiene program at a community college in Los Angeles into the pilot study, students now have the option to pursue a bachelor's degree in dental hygiene at a public college. The cost of this degree will be more affordable and give the opportunity to get a 4 year degree to those who are not able to pay private school tuition fees. I think that this goes hand-in-hand with the mission statement of Foothill College to provide an education to a diverse population of students especially those who are under-privileged and under-represented.

The idea of having community colleges confer Bachelor degrees is not new. Community colleges in 20 other states already offer bachelor's degrees in specific fields. Although the colleges can increase fees for the upper division course work, it would still make the degree more affordable for the student and enable them to find well-paying jobs. This will also benefit companies/businesses by meeting workforce demands in California where employers often struggle to find qualified people. My daughter is a sophomore at San Jose State and is majoring in animation and illustration. When she started the program last year, she was told by her counselor that it would take her at least 6 years to complete her degree because the system was so impacted. She is doing what she can to get through her program as quickly as possible. If more community colleges can offer bachelor degrees, it would ease the burden on the state university system and allow students to get through their education in less time. Getting them out into the workforce sooner and with less debt.

This is such an exciting time to be part of education and the great community here at Foothill College. It is definitely a win-win situation!

**Week 3: February 1, 2015**

### [Authentic and Traditional Assessments in Dental Hygiene](#)

I've been an educator for many years in dental hygiene and have taught a variety of subject matter from head and neck anatomy, histology, dental morphology, applied pharmacology to clinical dental hygiene techniques. I have assessed students' mastery of the material in different ways using traditional methods like multiple choice tests and other forms of assessment like performance evaluations. Last fall I attended the Professional Development event on authentic assessment. I had heard this term several times over the past year but didn't really know what it was. At the event I learned that authentic assessment involves having the student perform "real-life" demonstrations of meaningful tasks. A rubric is used to evaluate the student's performance of the specific skill or task. This is the foundation of dental hygiene education. I realized at the end of the course on authentic assessment that dental hygiene educators do this all the time.

When the student starts the dental hygiene program, he/she is learning new skills and tasks each week related to the practice of the dental hygienist. When the new skill or task is introduced to the student, the grading rubric is also given to the student so he/she is aware of what is needed to show mastery of the material. This includes dental hygiene instrumentation like probing, exploring and scaling techniques. Other tasks that are evaluated include health history interviews, taking and recording vital signs, infection control procedures, extra/intraoral examinations, and developing a treatment plan. The student is given time to practice the new skill/task before being evaluated. Each task and skill needs to be demonstrated at a satisfactory level of mastery in order for the student to progress to the next skill/task.

Not all of the assessments are performance based. In order to become a licensed dental hygienist, the student must pass a written national board examination and a clinical licensing examination. The national board exam is taken during the spring of the second year of the dental hygiene program. This is a traditional examination with multiple choice questions that assess the students' knowledge of the health sciences,

radiology, dental hygiene assessment procedures, and patient case studies. In order for the student to be prepared for this exam, the dental hygiene curriculum needs to cover specific information and topics critical to the practice of the dental hygienist.

Both forms of assessment, traditional and authentic, are important in dental hygiene education. It is critical to evaluate the student's mastery of dental hygiene knowledge which is based on scientific evidence and current research. This establishes a knowledge base for the dental hygienist which helps her/him develop critical thinking skills needed to individualize treatment and oral hygiene instructions for each patient. Traditional assessment can best determine the student's ability to understand the evidence and rationale supporting the knowledge base of dental hygiene education. Performance based evaluations determine if the student can deliver dental hygiene care in a safe and competent manner. Having the rubric available prior to being evaluated, allows the student the opportunity to understand what is needed to master the skill, review the process and practice the skill. The ultimate process evaluation in the journey to becoming a licensed dental hygienist is the clinical licensing examination that the student must pass after graduating from the dental hygiene program. I'll talk more about this authentic assessment next time!

**Week 4: February 8, 2015**

### [Dental Hygiene Licensing Exams](#)

The journey to become a dental hygienist is rewarding, challenging and pushes the student to their limits both academically and clinically. As an educator who has been on the same journey, I am reminded of the challenges along my own path to my educational and career goals as I work with students in our dental hygiene program at Foothill College. The rewards of helping students achieve their own goals brings me tremendous satisfaction and a sense of accomplishment as an instructor. This is especially true when the dental hygiene student becomes the registered dental hygienist.

As I discussed last week, traditional and authentic assessments are a major part of the journey to become a dental hygienist. In order to become a licensed practitioner, the dental hygiene student must pass two important assessments: the National Board exam and a Clinical Licensing exam. These two exams test the students' knowledge of evidence-based science, critical thinking skills, patient care techniques and the ability to handle and perform under a lot of stress!

The National Board exam is a computer-based exam that is taken by every dental hygiene student in the US. It is comprised of multiple choice questions and patient-based case studies that evaluates the students critical thinking skills and knowledge about evidence-based science courses such as anatomy, microbiology, pharmacology, oral pathology, periodontics, dental hygiene process of care and community dental health. When I took my national board exam many years ago, it was an all day exam and I filled in bubbles on an answer sheet. Now students go to testing sites and take the exam on a computer. The stress level is the same either way. In order to take the licensing clinical exam after graduation, you must pass the National Board exam with a score of 75% or higher. The students always worry that they will be the first to fail the exam. In all my years at Foothill College, we have not had any students fail the exam because they are so well prepared. During spring break, the students take the exam and get the results in early May. This weekend the students are attending a 3 day seminar to prepare them for the exam. I just returned from a California dental hygiene educators meeting and talked with a representative from a company that has developed an online national board prep course. It has many features to help the student prepare for the exam and would give them the ability to take practice tests in the same format as the real exam. An added benefit is the cost...it seems to be less expensive than the in-person seminar course and they would have up to 3 months of access to the online course. I think that this will be a great option for the students next year.

During spring quarter of the second year in the program, we begin screening patients for the clinical board exam. This year the students will be taking the WREB (Western Regional Exam Board) clinical exam at a neighboring community college. The students will need a score of 75% or higher on this exam to pass and then be able to apply for a

license to practice dental hygiene in California or any of the other states that accept the exam. This is the ultimate authentic assessment for the dental hygiene student and what a stressful one it is! Everything seems to ride on this exam...all the years of education and preparation ends with this exam. The WREB exam has specific requirements for the selection of a patient. The patient has to have a specific number of deposits on a specific number of teeth. It is not easy to find these patients and we screen many just to identify a few patients. It can be a very stressful process for the students as we near the deadline to identify a patient. Once a patient is identified, the student will take the patient to the exam and scale/debride the selected qualifying teeth. Their ability to remove the hard dental deposits from the teeth without causing tissue trauma is evaluated by 3 independent examiners from the WREB. If the students are able to remove enough of the deposits to achieve a passing score and are then given the “greenlight” to become licensed to practice. The student has two hours to complete the work.

California has only recently accepted the WREB exam and granted licenses based on the results of this exam. More than 30 other states accept this exam so the student who passes this exam is able to apply for licensure in those states too. This gives the student more flexibility in where he/she wants to work and live. I observed last August at the WREB exam being administered at the community college and was very impressed by the WREB administrators and examiners and felt that they really had the success of the students in mind. The atmosphere of the exam seemed more conducive for success and while it is still stressful, it did not seem unbearable. Students were able to focus on the task at hand without becoming too stressed out. I attended a WREB Educator Forum two weeks ago and was impressed with the many changes that have been made to the exam this year to reduce the stress including reduced fees to make it more affordable exam than before. The students will also be able to administer their own local anesthesia without taking the WREB anesthesia exam. This is a big thing for the students because they won't have to arrange for a licensed practitioner to administer the anesthetic for them (reducing stress!). This year all of the students are taking the WREB. Up to this year, the students almost exclusively chose to take the California State Board exam and would come back with horror stories of how crazy the exam was

conducted. I took the California State Board exam back in 1986 and I remember how stressful the exam was and I had a relatively good experience. I can't imagine how much more stressful it would have been if my exam hadn't gone so smoothly. I hope that my students have a positive experience at their clinical exam and have successful outcomes so that they can get out into the work force as soon as possible.

## **Week 5: February 15, 2015**

### **Faculty Calibration**

I don't know why but this one has been hard to write. I've started and stopped several times and can't seem to get past the first sentence. I was going to reflect on the adult learner and how adults learn differently but then I met with a student and the conversation gave me "food for thought." First I need to explain a little about my position in the dental hygiene program. I am the clinic coordinator for the second year dental hygiene students. This involves a lot of hands-on time with the students (which I love) but also a lot of administrative/management tasks (which are important for the clinic to run smoothly). I assign patients to students for treatment (keeping track of which patients students need to complete clinic requirements), create clinic rotation schedules that give each student equal days in the clinic to treat patients, track student completion of requirements, consult with students on their progress in clinic, and work on clinic procedures and protocols that should be consistently taught by all the clinical faculty. In addition to my position of clinic coordinator, I also teach several didactic courses each quarter. Being in charge means that the buck stops with me and that I am the go-to-person for questions and concerns by both students and faculty.

Just to give you a little understanding of what we do as instructors...our clinic has 18 dental units, a radiology lab, and a sterilization area. Students spend time in each area throughout the quarter. One instructor is in the radiology lab supervising students taking dental x-rays on patients and three instructors are on the clinic floor. Each instructor



supervises 5 students providing dental hygiene care for their patients or screening people for admittance as patients into the clinic. It is a busy time working with students and monitoring their delivery of treatment, guiding them in decision making, and evaluating student performance. Sometimes I feel like I never stop for the 3 hours that the students treat patients and move from one student to the next. It is really important for the clinical faculty to teach in clinic in the same way (or at least as close as possible).

This brings me to my conversation with my student. She did not have a good day in clinic. Several things happened that caused conflict between her and her clinical instructor. It seemed that some of it came from misunderstanding and some from a miscommunication. During our conversation it became evident that our faculty is not as calibrated as I had thought. This student was confused and felt that she had lost all confidence in her clinical abilities and skills. Now she feels unsure of what to do with her patients. She has a patient with advanced periodontal disease with some teeth so involved that they are loose. One instructor corrected the student's assessment of the tooth mobility and increased the degree of involvement from a 1 (which is the least amount of mobility) to a 3 (which is the most mobility). On a different day with a different instructor, the student was corrected again and told to change the mobility from a 3 to a 1. No wonder the student is confused, I thought! What I gleaned from our conversation was that the student needed to work on a few things: not circumventing her instructor by going to a different faculty member to get her questions answered faster or asking questions about protocols that are clearly outlined in her clinic manual. We discussed strategies to help the student not get overly stressed in clinic which seemed to drive her to go to other instructors in clinic. The other thing that I realized from our conversation is that our faculty is not as calibrated as I thought.

Calibration is a critical part of clinical instruction since students are working with multiple instructors who each bring unique experiences to the clinic. Students learn different things from different instructors. I remember from my own experiences in dental hygiene school at UCSF that each of my instructors taught me different things: one emphasized gingival descriptions, another showed me how to scale the distal surfaces of molars with

the flipped end of the Gracey 13/14, and someone else taught me how to manage my time. What can be confusing to students is when instructors don't interpret clinic protocols and procedures in the same way each time or the same way as other instructors. This makes me think of reliability in evaluating students. Intrarater reliability refers to an instructor being able to consistently assess students in the same way every time while inter-rater reliability refers to multiple instructors being able to assess students in the same way every time. Both types of reliability are critical for fair and consistent evaluation and learning for the dental hygiene student. Instructors who are not consistent in their interactions with students create confusion for the students and a sense of unfairness. Differences between instructors on how they interpret clinic protocols with students also creates confusion and feelings of frustration for the students. Being the clinic coordinator it is my responsibility to calibrate our faculty so that our students can have a positive experience in clinic and that the environment is conducive to learning. We did have a calibration session this past fall quarter but I can see now after the conversation with my student that we have several areas to work on. This is an on-going process and I will start working on our fall calibration session for faculty!

**Week 6: February 21, 2015**

### [Learning and the Adult Student](#)

Foothill College is such an interesting place to teach. We have a diverse population of students on our campus-different ethnicities, races, ages, cultures, preferences. I love interacting with so many different people and learning about their unique backgrounds and experiences. Our dental hygiene program reflects much of the college's diversity. Even though the majority of our students are women, men do apply to the program and last year's graduating class had one male student and our current first year class has one man. The "y" chromosome brings a different element to the class and balances the

atmosphere a little bit more between the personalities of 23 other females. Our program also attracts students from a wide range of ages. Each class obviously has a different make up of students but most classes have students from differing stages of life. Our current second year students range in age from the early 20's to almost 50 years of age. They bring a wide variety of backgrounds and current life experiences with them to the program. Some students are married with children, some are recently married, some are single and living with their parents, several are single but live on their own and some moved to this area to attend the program. Students commute every day from various cities across the Bay Area such as San Francisco, the east bay, the peninsula and San Jose. Many of our students already have bachelor's degrees in other subject areas but realized that their previous career choices were not bringing them fulfillment. Some have been working in the dental field as dental assistants or dental office managers for many years and decided to go back to school to pursue a career in dental hygiene. In prior classes, we have had students who were trained as dentists or dental hygienists in their countries and after immigrating to the U.S, discovered that getting their licenses here would be very expensive and time consuming. An alternative for them was to study dental hygiene and become licensed in the U.S. I love to talk with the students and learn about their journeys and life experiences and what brought them to our program.

To be an effective educator, it is important to consider how these life experiences influence each individual student and how they learn. Andragogy is the theory of how adults learn and having an understanding of the principles that dictate adult learning can help us as teachers be better at reaching our students. Malcolm Knowles, a theorist of adult education, identified six principles of adult learning. He listed several characteristics of the adult learner such as adults are internally motivated and self-directed. Adults bring many life experiences with them to learning situations. They are goal oriented, practical and like to be respected.

I feel that respect is an important principle of interacting with adults in the learning environment. Remembering that an adult student will have many past experiences that will dictate how he/she reacts in different situations is critical to establishing a

relationship of respect between the student and instructor. We can demonstrate respect for our students by taking a genuine interest in them and their success. Taking time to talk with them and help them plan strategies that will help them succeed. Encouraging them to express their ideas and providing feedback to us gives the students the opportunity to share with us their life experiences. It is important to treat the adult learner as a colleague.

During the past week, one of our students did not have a successful outcome for one of her clinical evaluations. She was given a designated period of time in clinic to remove the dental deposits from a specific number of her patient's teeth which turned out to be a challenging case. The student was very upset with her outcome (she did not pass but has the opportunity to redo the exam) because she felt that she had progressed in her clinical skills since last quarter. When she met with her clinical instructor at the end of the session to review the exam and paperwork for the day, her instructor made a comment that it was obvious that the student did not know how to use her dental instruments because so much of the dental deposits were still on the patient's teeth. No solutions or strategies for ways to improve were offered to the student and she was upset by the comment. The instructor was not intentionally trying to be unkind. As a result of this interaction, the student had lost what confidence she did have in her abilities and was unsure of what to do next. I spoke with the student to go over her progress and see how I could help her. We decided to spend some time reviewing her instrumentation technique with several of her instruments. She was relieved that it would be possible to have guidance toward improving her skills. The student had also spent time reflecting on her performance and had identified several key areas that she could work on. After discussing her observations and setting up a time to review her instrumentation, the student felt better and was more positive about herself. We did spend time together working on her skills during the week so now the student is ready to retake the exam and is more confident in her abilities. Giving her the time and attention she needed was important for the student to learn from the experience, move beyond her failure and focus on improving her skills to succeed.

It was one of those moments that reminds me why I love to teach: helping my students succeed.

## **Week 7: February 28, 2015**

### **Reflective Thinking**

#### Reflective Writing

Our students do a lot of reflective writing in our program. Each quarter they reflect on what they have learned in their eportfolios in several key areas related to the core competencies for our graduates: Process of Care, Health Education Strategies, Infection & Hazard Control and Ethics & Legal Principles. As lead instructor for the second year dental hygiene students, I read their reflections each quarter. It is always interesting to see how the students perceive their growth in each area and what they identify as learning moments.

Reflective writing is about thinking...thinking about an event or something that happened and then analyzing it to determine or realize what it meant to you and how it will influence your learning or practice as a professional. Last week I met with a student who had not passed a clinical test. She had attempted to clean an area of her patient's mouth and was graded on how well she removed the hard dental deposits on the teeth. She was deflated by the results and was very upset by her performance. Several days later the student and I met to discuss her exam and to strategize on areas that she needed to improve in order to successfully take the exam again. When the student sat down in my office, she told me that she had reflected on her experience and had already put together a list of skills that she needed to work on. I was so impressed by her and how she had really given the situation a lot of careful thought and had come to several conclusions on her own-she needed to improve her exploring skills and review basic instrumentation techniques with her ultrasonic scaler. It was evident that she had thought critically about her performance and where she needed to improve her skills.

She also discussed how improving these skills would help her to be a better dental hygienist and healthcare professional.

This past week we had our mock clinical exams where each student identifies a patient that meets a specific list of criteria (like a certain amount of dental deposits). Since our students are taking the WREB licensing exam and not the California State Licensing Exam this summer, I changed the procedures of our mock board exams to resemble the WREB exam. New paperwork and new sequence of procedures awaited both students and faculty. The mock exam is spread over 3 days and we try to simulate the board experience as much as we can. We do this once per quarter during the second year in the program, so students have the opportunity to go through the exam a few times by graduation. By the time they take the real licensing exam, they are prepared for anything. Thinking back on this past week, I felt that the exams went smoothly for it being the first time. The faculty really liked the change in format and once they got used to the new forms, the exam proceeded without incidence.

I spent time thinking about the mock exams at the end of each day. After reflecting on the exam, I realized that the criteria for choosing appropriate patients is not clear enough for identifying patients that are at the skill level of the students. Several students had to bring very difficult patients to the exam because they did not have a patient that met the criteria. The instructor who worked with these students did not choose specific teeth for the exam but left it for the instructors to decide on the day of the exam. This puts the instructor at a disadvantage when checking in the patient for the exam because she may not have worked with the student on this patient in clinic. Dental deposits vary a lot from patient to patient and can be influenced by the patient's metabolism, diet, oral hygiene and length of time since last dental cleaning. Deciding the number of teeth for a student to clean for a mock exam is difficult on the day of the exam because we may not have the background information on the patient such as how difficult it is to remove the calculus from the teeth (sometimes it seems like you need a jack hammer to remove the dental deposits). I will require the clinical instructor to make the call and designate the specific area for the exam and then note the reason why a specific area was

chosen. This will help the instructor on the day of the mock exam when she checks in the patient for the exam.

I also plan to adjust the criteria for each quarter so that students and faculty will have an easier time choosing patients that are not too difficult. I want to specify the number of calculus deposits and the quality of the calculus that is required for each quarter. It will be a progression from an easier case in fall quarter and then step up the difficulty so that in spring the student is bringing a patient that is close to the clinical exam requirements to the exam. This mock board exam will definitely give the students the an exam experience that is closer to their licensing exam in the summer. My hope is that it will give the that little bit of confidence they need to successfully pass the exam and become licensed dental hygienists.

My student who reflected so carefully about her failed exam did do better on the calculus removal portion of the mock exam. I felt that her thoughtful consideration of her previous exam performance helped her to identify areas where she needed to improve and she utilized the strategies that we had discussed during her mock exam. I am so happy that she was able to perform better as it bolstered her self-esteem and confidence in her abilities.

**Week 1:** January 13, 2015

**What is a Transfer Center and how is it supposed to help students?**

Transfer Centers for the California Community Colleges were legislated with AB 1725 in 1988. They are mandated by law and were created to primarily serve underrepresented students, those who historically have not been adequately represented in the UC and CSU systems. Transfer Centers provide academic and personal counseling services, advocacy, assistance in completing college applications, encouragement to apply, and access to college representatives. This access to college representatives takes place through on campus contact via information tables, individual appointments, and/or transfer events, such as transfer fairs and special workshops. In addition, some campuses organize bus trips to provide students an opportunity to visit the transfer destination, an opportunity especially meaningful for those students who would otherwise not be able to visit. Sounds simple, right? But, according to the State of California Legislature, not enough students are taking the transfer path.

What are some common barriers to a successful Transfer Center program? If all it takes is taking the right courses, and a 3.0 transfer GPA for most schools, why are not enough students transferring? These two components make up at least 80% of most guarantee transfer agreements. The answers to these questions though are not simple, and are actually quite complex and varied.

First, there are the affective barriers. Imagine growing up with both parents working menial or middle class jobs and never having attended college themselves. In high school, when other students were going with their families to visit universities, you were at home with not even a question or two about your educational goals, much less a road trip to visit universities in person and actually visualize yourself attending. This is quite a difference that makes a huge impact on how these students view their options. It is not enough to simply provide the information. All community college staff and faculty need to constantly and actively work on changing the students' self-perception that they are



“university material”, no matter where they are located on the transfer path. They may be new students, just starting college, enrolled in developmental courses, or very near to finishing their two year program, or somewhere in between. They all need this message. First generation college students all have this barrier in common, but many other affective barriers may also affect any student’s self-perception, such as a problematic high school transcript, learning and/or medical disabilities, cultural expectations, or even family dynamics.

Then there are the logistical barriers. How do we connect with these students when most are running between classes, part-time jobs and family responsibilities? Transfer Centers are not a scheduled class, that students are mandated to attend. We assume that the students will find their way to us and access the resources. What are the statistics on percentage of the actual general population that actually does access at least some of the Transfer Center resources? Just because it has been built, does not necessarily mean they will come.

Another barrier is staffing. With the most recent budget cuts, some Transfer Centers completely disappeared, while others have been slashed considerably. With 3SP funding, staffing may begin to reappear soon. But it takes a long time to rebuild once something has been dismantled. What kinds of services are currently being offered to students?

In future posts, we will look at some ways we have tried to address these barriers at our college and also hear from some of our students who have overcome these barriers. We hope you will join us!

**Week 2: January 28, 2015**

### [Peer Assistants and the Transfer Center](#)

When I first started working in the Transfer Center, our Articulation Officer shared a study with me. It was conducted by the RP Group and was titled the “Transfer Velocity

Project”. The study identified 7 California Community Colleges with better than expected transfer rates for their respective demographics, and provided extensive best practices and data regarding the creation of a culture of transfer on the California Community College campus.

One best practice that I was immediately drawn to was the Peer Assistant program. At the time we had very limited funding (still do!) and we were looking for ways to improve services without increased funding. The Peer Assistant program seemed ideal. The idea was to bring in students on financial aid with a Work Study award to work as peer assistants. We would train them and mentor them with two main objectives: 1. Encourage their individual growth, in terms of learning transfer opportunities 2. Train them to encourage their peers to access the resources in the Transfer Center, and assist them with front desk services. This has proved to be a very successful practice. If you are interested in looking at the entire study, The Transfer Velocity Project can be accessed at [www.rpgroup.org/css/TVP.html](http://www.rpgroup.org/css/TVP.html)

But I want to emphasize something here: Little did I know at the time, but I would end up learning so much more from them that I could ever teach them. And I also learned how powerful it was to have students come in to the center and feel so much more at ease seeing other students who looked like them. But please do not take my words for it! Please read below the experience and perspective of these recent peer assistants:

“My name is Hugo ('13), and I spent my entire collegiate career at Foothill Community College as a Peer Assistant in the Transfer Center. It was an experience that provided many opportunities to learn and make friends, plenty of challenges and, most importantly, countless cherished memories. Under the tutelage of the Transfer Coordinator, Maureen Chenoweth, I rediscovered the importance of community and the value of service. Beyond the simple, and seemingly routine, tasks there is a vast amount of good to be done for other students within the capacity of a Peer Assistant.

If you ask me, it doesn't suffice just to write about my duties and job function. Rather it is key for me to share examples of the type of interactions I was fortunate to have been a part of. Early in my tenure, I met a handful of other students during my venture to start

a Foothill College Transfer Club. With Advisor locked in, my task was to sell the idea behind the purpose of the existence of the club and recruit other students to be officers on the board of the organization. Little did I know that the people I would encounter would turn out to be like-minded students who shared many of the passions and early life experiences that I held. We worked diligently to launch an in-reach platform for the club to educate the student population about the transfer process, transfer opportunities, and a community support system that encouraged students to seek assistance and grow their confidence regarding pursuing a 4 year degree. Jason, Ben, Nadiene, Noe, Jessica, Chris, Colton, Tierney, and Anna have remained close friends of mine and we continue to see and support each other as much as life permits. If it were not for my willingness to open up to the resources and colleagues in my immediate environment, I would not have some of the personal connections I currently enjoy.

As a peer assistant, we may feel pressured to always give the correct answer to students. It may be a matter of ego, or an attempt to avoid losing credibility as a peer assistant. Whatever the reason, I learned that not knowing the answer or having to seek help is a natural human condition. In fact, the only way to ensure that we, in the future, can give a correct answer or know the name of a particular form to submit is to accept that our understanding of the world is limited therefore we all need to rely on resources which we do not possess. The majority of the challenges I faced were overcome by seeking help and committing to the idea that learning is an ongoing process, of which no person is immune to. Many people go out of their way to thank me in expressing their gratitude “for all the help” I provided. However, I am equally grateful for having had the chance to make a difference in another student’s life, even if only to ensure his or her credits transfer in. Challenges are only difficult if we must face them alone!

In concluding my thoughts, I must share one additional philosophy I have adopted since my time at Foothill. A philosophy that is based on the belief that service in the form of volunteerism is truly a telling activity. For many young, energetic freshman, their educational goals and career goals are still out of focus. Certainly exposing yourself to a variety of academic concentrations in a meaningful or strategic way can illuminate and pinpoint your areas of interest. However, I consider the opportunity to volunteer in

different capacities (ie with children, sports, environmental, hunger/homelessness etc) an exercise in identifying your passions and discovering the true sense of gratitude. College is a time to challenge yourself, make friends, self-discovery, and plenty of memories...

So, roll up your sleeves, don't be afraid to ask for help, find your special way of giving back to the community, and become a Peer Assistant!"

"I just graduated from high school a few months ago and this is my second quarter at Foothill. Although it has not been that long, I already know a lot about transferring to 4 year universities. Working at the Transfer Center allows me to help students who want to transfer, and what I have realized is that each applicant is unique and they have taken different paths to get to the same place. Helping others is the best part of the job, and as a bonus I learn something new every time I help someone. Since I am so new to the college environment, what I learn here will allow me to look at different paths that I can take to get to the place that I want." Gursimran, ('14-15)

"Transferring can be extremely stressful but, being amongst a wonderful group of highly motivated & skilled individuals has provided me a well grounded perspective on the transfer process. Maureen, Leslye & Victoria have given students, including myself, insightful answers to any questions or concerns students may have along side being open to suggestions on how to further expand the Center. Bus Tours to UC schools & meeting with representatives at Foothill has helped me narrow down my choices of school I'll be applying to. Thank you Transfer Center! " Annabella ('13/15)

So, you can see how effective this practice is. In the first blog we talked about one common barrier that many students face: not being able to see themselves as successful transfer applicants. This practice is a powerful tool that dismantles the incorrect notion that first-generation college students cannot be successful in the transfer process.

Next, we will look at the "Faculty Connection".

**Week 3: February 3, 2015**

### Critical - the Faculty Connection with the Transfer Center

As discussed previously, one of the biggest barriers to students' use of the Center is logistics. Students run between class and work and family commitments. But also, they often are unaware of the wonderful resources that are available to them here.

So, how do we connect with students and keep them informed?

Students are with the faculty every day in class. Faculty have an ongoing relationship with students. Therefore, this is the logical first step in reaching students. Sounds simple, right?

On our campus, we have the added complication of the quarter system. Faculty have twelve short weeks to teach a course and conduct final exams. These terms go by very quickly. To add in additional announcements can be a challenge.

To further complicate matters, we often operate as silos. We don't communicate as much as we could. And this happens on both sides. We are all very busy, and communication takes time.

Fortunately, we live in an age with limitless electronic communication systems: email, facebook, twitter are some of the most common resources. We utilize these in the Transfer Center, with email blasts and facebook and twitter posts. But we never lose sight of the face-to-face contacts. We make classroom presentations and show up in classrooms to make quick announcements about important events. The added bonus of these is that the faculty get reminded that we are here to serve students and that they can refer students needing transfer assistance.

I have had so many students report to me that the reason they started the transfer process was because a faculty encouraged them to. The simple act of encouraging a student to access any transfer resource, whether that be a counselor, a workshop, to

see a college rep, or to drop in to the Transfer Center, sends a very powerful message – the instructor believes the student is college material!

We are very proud of our faculty at our college. While they are 100% committed to teaching, they still find time to encourage our students to pursue their transfer goals. But there is always room for improvement and we hope to have more faculty engage with us to improve transfer success.

It truly takes a village! Next time, we will talk about the connection with Student Activities and Student Government.

**Week 4: February 17, 2015**

### [Student Activities and the Transfer Center](#)

What better place than to connect with students than Student Activities?

Student Activities is the central hub of campus life. Students get involved in clubs, student government and leadership. It is the perfect place with which to collaborate and market in-reach efforts of the Transfer Center.

Clubs: Many groups are centered around a common interest in a major, so this is a great place for college representatives to visit club meetings and provide a brief presentation on transfer opportunities in the major of interest.

Heritage Months: Our college's Student Activities program sponsors a full academic year of heritage related events. So, it is a natural place to partner with for special events for example: Black History month and Historically Black Colleges and University transfer information, Women's History month and women's colleges transfer information. It is the perfect opportunity to provide in-depth information and the opportunity for students to explore these topics.

Transfer Club: Our college has a Transfer Club that has funding and the motivation to provide special student-generated activities such as university bus tours, transfer workshops, networking opportunities and sustained interest and contact with the larger student body. When they report to the organization on their activities, they are promoting transfer opportunities!

Student Government: The Student Government's mission is to represent the interests of the students and serve as an information conduit. So representatives will assist in getting important transfer information out to students and receive input from students regarding need and interest in transfer-related topics.

Events and the Campus Center: The Campus Center often serves as the main location for large events such as the annual Transfer Fair. It is important to collaborate with staff in this area to maximize effective marketing efforts and scheduling concerns.

Many thanks to the outstanding Student Activities program staff at our college!

Next: We will look at how the college representatives serve to promote transfer success.

## **Week 5: February 26, 2015**

### **College Representatives on campus**

As a Transfer Center Coordinator, one of my favorite tasks is to schedule the college rep visits. I enjoy it so much because this is where so much magic happens.

Imagine that you come from a background where very few relatives, or even friends, have gone on to college. And now, here you are at a community college and you are thinking that perhaps, you do have what it takes to transfer to a four-year university. But it's scary! What if your application is less than spectacular, what if it includes a grade on a transcript that is not so great? And worse yet, what if you do something "wrong" on your application? How can you really feel that you have done the best that you could for

that application, and better yet, that there is a good chance you will be accepted? How will you know that the financial aid package will be sufficient? What if you need housing?

Students can visit the Transfer Center and can get great advice there. And we hope that students will start here, to explore, and to ask questions. But what better place to get the assurance that they need than the person/institution who is actively involved in the process? If a student wants to go to UC Santa Cruz, let's say, and they meet with a Foothill staff member, the staff member can show them ASSIST.org, and provide lots of other great information. But now imagine that the student is sitting with a UC Santa Cruz representative, and they get the exact same information. Which individual will make the most impact? You guessed it! It is the UC Santa Cruz rep.

Interestingly enough, the reps here are largely underutilized. Partially, it is because students are very busy people and don't think of using this invaluable resource. But I suspect that they are also a little intimidated, that meeting that official person is just a little too scary. What if we all encouraged this participation? If students hear it from more than just one or two individuals, maybe taking that important step will be just a little less scary.

Students can connect with college reps in 3 different ways on our campus: 1. Attend Transfer Fairs; we have one in the fall and another in the winter term. 2. Make an individual appointment with a college rep. Students can make appointments online from the Transfer Center website, or they can show up in the Transfer Center. 3. By viewing the calendar on the Transfer Center website, students can also see who is tabling in the Campus Center and when those visits take place.

We hope you will also encourage students to take advantage of this great resources!



**Week 1:** January 18, 2015

**New quarter, new community**

Another quarter, another chance to try to create a true community in my classes. I read a lot of research, try various tactics and think long and hard about the best way to do this. So, each quarter, I try new activities aimed at making students feel included and therefore capable of success.

I believe the order of these is crucial; first, students must feel they are a member of the community and only then can most of them start to reach for the high expectations I set for all of my classes.

This quarter, as I brainstormed ideas to build this feeling of community, I really thought about what that word means; what is it I'm actually trying to accomplish?

Quite simply- I want every student to feel they belong and are valued in my class.

First and foremost- and students have confirmed this- people feel included when you know their names. I learn my students' names in the first 2 weeks of class. Period. That doesn't mean I never make mistakes, but by trying, I am showing them this is important to me and therefore they are important to me.

It is also crucial that students feel that their perspectives and ideas matter. I stress the idea that the classroom is the place to make mistakes, bounce their ideas off myself and their classmates and express their opinions.

Also towards this end, I try to learn something about the personal life of each student. What did they do before being in my class? Do they have kids? Work full time? What are their hobbies? Where have they traveled? I get this information both through talking to my students in small groups and some planned activities that are well worth the class time devoted to them. As any teacher knows, this isn't a simple task with some students. There are always some more shy or just more private people in every

class, but I just look at this as an added challenge to find some common interest with each student. After all, I expect my students to work really hard to learn the material I am teaching, so I am more than willing to work hard to connect with each of them.

The first day of class, I also devote about an hour to an activity in which the students move in groups of 4-5 through 10 stations to learn about important class policies (by talking about portions of the syllabus) and my teaching philosophy (through stations that have information about active learning, learning vs. memorizing, brainstorming about characteristics of successful students). One of the stations is a Q & A session with me. They can ask anything they want about the class or about me personally. This is a great way to meet students in small groups which makes them more comfortable than a one-on-one setting with the teacher. They ask me about where I went to school, my kids, and my personal favorite- why did I choose to teach at the community college? (More about my answer to that question in my next post!)

If students feel comfortable asking about my life outside of class, they also feel comfortable talking about their personal lives, asking questions and discussing problems. And isn't that the true definition of a community?

I don't have hard evidence that these efforts increase learning, but students do tell me they feel that I really care about them and want them to succeed- that in itself makes it worth it.

Creating the community is obviously just the first step to creating a successful classroom. But teaching and learning in any subject is that much easier when we all enjoy coming to class because we feel connected and welcome.

**Week 2: January 25, 2015**

### Right vs. Well-thought-out Answers

So many students enter my classes with the idea that memorization is learning and that they should just memorize exactly what is said to get an A. I explain on the first day and just about every day after that that critical thinking is one of the most important lessons I'm going to teach them and that this ability will transfer to any subject and more importantly, to their lives outside of school.

Many of the questions I pose to my students are aimed at getting them to think critically about the topic at hand. Toward that end, I often ask a question, have them discuss it in small groups and then ask for volunteers to explain their answers. Most times with this type of question, I don't tell them the answer to the question after we discuss it as a class. This is very frustrating to many of the students who just want to know the "right" answer so they can commit it to memory and move on. But, I've explained to them that this technique is aimed at getting them to get in the habit of searching out their own answers and thinking about all possible answers and why multiple answers can be logical and thus good, well-thought-out answers regardless of whether or not they are actually "right".

During this past week, I saw clearly what happens when I make the mistake of giving the "right" answer when I shouldn't have.

In my Microbiology lecture, I raised a question that had 2 possible answers; it was concerning which type of bacteria would be most affected by a particular drug. The goal of the activity was for them to learn about the structures of the two types of bacteria and from that come up with a logical reason why one type would be more easily killed than the other. Every time I've done this activity (including this week), I've had student groups who came up with both points of view to explain their reasoning. After students that came to each answer have shared their reasoning, I've told the class that both answers are logical, but that I'm not going to tell them the right answer- which type of

cell actually *is actually* more affected. This always goes well; some students are slightly frustrated but most are curious about finding out. And I always explain again why I'm not giving them the answer; both answers are logical, all students learned about the different types of cells in searching for the answer and so everyone was successful.

This past week, I don't know what came over me. Maybe it was the more vocal group of students who seemed really interested in knowing which cells the drugs worked better against made me believe they really were intent on learning how the drugs worked. Whatever caused it, I did something I haven't done before and gave them the "right" answer.

As soon as I did, my heart sank. A couple students actually did a little "I-got-the-right-answer dance" waving their hands in the air- no joke. I knew immediately that I'd made a mistake and that I will never again give this answer in class. I explained to them at that point that this is why I don't usually give the answer and that both answers are valuable and logical, but the damage was done; some students came out of the activity feeling "wrong" when that was the opposite of my intention.

This goof on my part solidified for me, once again, that creating a class of critical thinkers instead of good memorizers is one of my main goals for all my classes. I know one mistake won't undo all the other parts of the class aimed at this, but the mistake I made actually made me realize I want to come up with even more questions that have multiple, acceptable and logical answers and NOT tell the students which one is "right".

**Week 3: February 2, 2015**

### [Still not about Biology...](#)

I have changed the name of my blog. While the title is not all that important, I decided that since I have yet to talk about anything related to Biology that I wanted the title to

show what it is I am actually spending time reflecting on- the learning that takes place each week in my classes, by ME.

The more I teach, the more I am learning that just being there as one more person my students can turn to can help some of them through difficult times.

As I get to know my students this quarter, I'm once again humbled by the level of responsibility many of them have in addition to their classes. Some of them work full time, are married, have children, support their parents, and much more. I have students who have recently become single parents, are new moms and dads, and who are completely sleep deprived (see below).

I had a completely different college experience; my parents saved and were able to pay for my education and I was privileged to be able to go straight to college after high school. However, I have really tried to be compassionate about the outside "pulls" on my students' time and ability to focus. I tell my students every quarter that I know "life happens" and they just need to keep me in the loop about what is going on with them so I can help them be successful in the class if other things in their life aren't going as planned.

This week, I pulled a student aside and casually joked with him about the fact that he was consistently falling asleep in lecture; "that is no easy feat in my class," I told him since we do lots of group work and other activities. He was immediately apologetic and confessed that most days he comes straight to my class after working the night shift as a paramedic. "I don't mean to be disrespectful," he said. He told me he really needs this class to fulfill his dream of becoming a doctor and so wants to take it even though it means 12 weeks of consistent sleep deprivation and extremely hard work. I told him that if he had that much commitment that I believed he'd make it happen.

I am grateful that many students have enough support in family and friends that they may not need to talk to me about these non-school-related problems. But sometimes, students come to me to discuss some of the most painful parts of their lives.

Over the years students have told me they are depressed, have eating disorders, or are homeless. I've listened as a young woman explained she'd been raped and had to have an abortion as a result of that rape, but couldn't tell her parents because they could never understand. I've listened as students describe being abused by their fathers or boyfriends. Many times, I've counseled these students to talk to a mental health professional and have personally walked them over to meet with counselors on campus (what an amazing group we have, too!).

I've often thought about how I would handle such an all-encompassing problem and still continue with classes- the answer is I'm not sure I would have the drive to finish. The determination I see in so many students to get a degree, find a new career, or better their lives in some way, is inspiring to say the least. If they can push so hard to finish their classes, I can continue to try to be there to support them when they need it.

I know I can't reach every student. Some will always just come to class and do what is asked (or not) without ever thinking about me as anything more than their teacher; I guess that is OK. I just hope that if a student really does need someone to talk to that I have made myself accessible enough and them feel comfortable enough that they consider me one of their choices.

#### **Week 4: February 9, 2015**

#### **Trick question!**

Every quarter, without fail, someone calls one of the questions on my midterm a trick question. I HATE it when students say that! But first, the story about how it went down this quarter.....

One of the main ways I assess the quality of my multiple-choice questions is when I have my students re-take the multiple choice portion of my test in groups using their notes and textbooks. They are not allowed to ask me anything but clarifying questions. While the groups are debating the answers with each other, I have a chance to

“eavesdrop” on their discussions; I always find this to be one of the most fascinating times during the quarter. It provides a window into how my questions are read, understood and interpreted.

One of my favorite discussions I heard last week:

Student 1: “But, I *know* she never said this in class- I don’t have it in my notes!”

Student 2: “I can’t find the answer anywhere in the book.”

Student 3: “How does she expect us to figure this out? It must be a **trick question**.”(As you can tell, in the heat of discussion, students often “forget” that I’m in the room listening.)

Little did this student know that being called “tricky” is one of my biggest pet peeves. So, I took a deep breath and told the class that just because while studying they haven’t been able to memorize every answer on the test doesn’t mean it is tricky; it may simply mean they have to spend some time actually thinking about it. I also explained that “tricky” implies my goal is for them all to get the wrong answer as opposed to having them really think about the answer.

So, I decided to guide their discussion in another direction. (I know I said they aren’t allowed to *ask me* for help, but sometimes I can’t help myself from *offering!*) I explained to the class that just because I didn’t say something outright and the book doesn’t explicitly state an answer, doesn’t mean that they have no other way to figure it out. I asked them what they already knew about the question and asked leading questions to get them really thinking instead of just trying to look up the answer.

The result after a few minutes was multiple students having an “aha!” moment. Once these students figured out that they knew how to get to the answer, they discussed it with their small groups. Then- **and here’s my favorite part-** they went around the room and guided other groups through the same thought process. Peer teaching and learning at its best!

This amount of discussion obviously doesn't happen for every question- just the more advanced ones that require critical thinking to figure out. But, for this question I felt like I got multiple points across unrelated to the content of the question itself; some students now believe that they can use information they have already learned and apply it to new situations. I also got the class truly teaching each other and seeing their classmates as allies.

Hopefully, in the future, at least some of my students will take the message with them that just because a question requires more than rote memorization, doesn't mean they can't tackle it. And, it doesn't mean it is necessarily **tricky!**

## **Week 5: February 18, 2015**

### **Misconceptions**

Trying to break through my writer's block this week, I started thinking about some strategies I use to help my students grasp certain key concepts in my classes. One thing I think is really important is to clear up any misconceptions about a topic right at the start.

Two of my **favorite** misconceptions in my Microbiology class:

- Vaccines cause autism.
- Taking antibiotics when I have a cold or the flu will help me get better faster.

These commonly held beliefs can lead to a true block in one's ability to learn about a subject. Obviously, if anyone is thinking, "I don't care what that teacher says, I'm NOT vaccinating my children", it will be very hard for them to think at all about anything concerning vaccination.

So, sometimes I start with the misconception. When we discuss vaccines for the first time, I'll ask, "Who has heard that vaccines cause autism?". Almost all of them have heard this even if they know it is a completely false statement. Then I walk them



through the research- the evidence and the conclusions reached by 100's of independent studies; this only takes a few minutes of time, but at least opens the door to some students who've heard the "rumor" about autism but have never heard that the author of the single (that's right- exactly one) study has even recanted the paper in which he claimed this. I guess this approach could be called "show them the evidence".

Other times, I am more subtle. When we start talking about medications available to fight the various germs that attack us, I let them figure out why drugs are very specific to their targets. I have them draw the structures of the two and then ask them to decide which drugs work against which pathogens and why. Fairly quickly people see that medications used to fight bacteria are "going after" things only found in bacteria. Since viruses don't have those same items, they won't be destroyed by the drug. This is a way they can come upon the answer using previous knowledge of a subject (we've already studied the structures present in bacteria and viruses).

Once the information is out there, students are able to focus on the topic much more easily. Then, I can explain why it is crucial that a large percentage of the population be vaccinated. Or, I can get them to think about what really happens when you take an incorrect medication.

So far, I've talked about students and their misconceptions about biology. I want to be clear that it hasn't gone unnoticed that teachers very often have many misconceptions of their own- about their students especially.

All of us who've been teaching for a while have fallen into the trap of misjudging a student and realizing later that a misconception led us astray. But there are also those times when I discover that I was completely incorrect about how a believed students were learning the material.

Some questions I've heard have really blown me away and made me think about what the students are actually understanding/learning. My two favorite student questions that made me realize I TOTALLY don't understand how some students are processing the information in my courses:

- *When looking under the microscope at DNA, “why don’t I see A, T, G, C?”* I clarified with this student and yes, he meant why didn’t he see the actual letters A, T, G and C under the microscope!
- *After discussing viruses in lecture, “so these are the same things that get into our computers- you know computer viruses?”*

So while it is important to continue to try to dispel student misconceptions about biology, I have to also be alert to my own misconceptions about what is being understood by students.

Identifying the misconceptions is not always easy, but clearing them up is definitely the more difficult task.

## **Week 6: February 23, 2015**

### **The Big Picture**

No matter what class I’m teaching, I’m pretty sure all of my students get tired of hearing me say “the big picture”. You’ll likely get tired of “hearing” me say it just by reading this post.

- “Make sure you understand the big picture before you worry about the details,” I advise them.
- “What is the big picture regarding today’s lecture?”
- “Don’t forget to consider the big picture...”

Why do I use a single phrase so often? I believe it is that important. The big picture items are the things I want my students to remember 5 years from now, essentially the take home message. This goes much deeper than memorization of facts and spitting out answers. It is much more about becoming educated members of society and thinking more deeply about the importance of the subjects you are studying.

Like any teacher, I hope students will learn many things during my classes. Overall, I want them to understand how each topic relates to the field as a whole and, most importantly, to the world around them. I spent many years as a student and often asked myself “why do I need to know this?” and “will I ever use this again?” Consistently trying to put my finger on the truly important take home message, helps me focus my activities in class.

In the past weeks, my Microbiology class has been discussing many different things that make humans sick-from bacteria to viruses to worms. All of these groups have unique ways of infecting us and causing us harm. As happens every quarter, one of my favorite aha!moments happens as we talk about worm infections. Everyone is always grossed out by this topic and rightfully so-pretty nasty to think about having a worm living inside your body producing as many eggs as possible as fast as possible. Most people in the U.S. never have to deal with these infections, but they are the most common infectious agents in developing countries.

But the big picture is something that is much more horrifying- the fact that if the entire world’s population had access to proper sanitation and clean drinking water, most of these worm infections would completely disappear. When I ask students to think about this big picture item, there is often a look that comes over their faces that tells me they really got it. Maybe students never think about this again, but I have to believe at least some of them do.

This real-world, big picture problem is something that most college students in this country haven’t thought about before, but I hope by continually stressing the importance of the big picture that they will continue to think about it for many years to come.

Since we all have our big picture topics to discuss, hopefully students leave Foothill feeling they understand why they learned much of what they did and they know how to use the information again.

At least that is what I see as the big picture.

**Week 7: March 4, 2015**

### [Reflecting on my reflections...](#)

When I started doing this blog, it was the first time I'd ever written about my teaching. I've spent a lot of time reading, talking and thinking about teaching, but writing about it is much harder for me. For one thing, I wish I were funnier in print because I feel that I'm quite amusing =) in person! Despite this, I feel that I learned a lot over the course of just 7 weeks.

Top 5 things I learned, or re-learned from blogging or reading other people's blogs.....

- *My colleagues who aren't in a classroom each day have a lot to teach us.* There are so many people on campus who are helping students succeed. Often it is contact with just one caring adult that makes the difference and that friendly face can be in the Admissions Office, the library, a classroom, a counseling office, or just about anywhere else on campus. I have read many of your wonderful blogs and can feel your interest in and passion for student success. I will continue to read through the ones I haven't had a chance to look at.
- *Writing and reading other blogs about teaching just strengthens my resolve to continue to improve.* In order to write each week, I had to think back even more than usual (and that's saying something) about what went well and what did not; this kept me even more in tune with what I could improve, what is working well and what needs to be scrapped all together and developed from scratch. Just like in every aspect of life, there are those people who constantly strive to do their job better and just BE better and those that are less likely to work hard to improve (this goes for students as well). I'm so glad I can count myself in the first group as I believe this attitude is crucial to being a good teacher.
- *This job can be hard!* It isn't just me who feels ineffective and frustrated at times. It was so refreshing to read about other teachers' frustration with students being

unprepared, activities that didn't go well, etc. I know I'm not the only one, but reading about people's feelings on their blogs really made me feel connected.

- *I REALLY want to observe and learn from my fellow teachers.* There is such a rich pool of resources right here on campus. I am applying for a sabbatical soon and think this will be one facet of my proposal- watching and learning the techniques of great teachers.
- *I probably won't blog again(never say never),* but it challenged me and made me look at my teaching in some new ways; so, I guess I can call it a success!

I look forward to more in person discussions about teaching and learning on campus!

**Week 1:** January 1, 2015

**The first day, the first impression**

After something like seventeen years of teaching, three quarters a year, I've experienced many "first days" of class with my students. In the early years, I dutifully handed out the course syllabus and (gulp, yikes, really?) READ it to them. As time went on, and the use of the internet became a staple in my class, I posted the syllabus a few days early, sent an email inviting the class to read it ahead of time, and then (gulp, yikes, really?) READ it to them on the first day.

Over the past several years, I've decided this is a really boring way to start the term, students don't listen or pay close attention (a conclusion I've drawn based on the enormous number of syllabus-related questions that came up during the quarter, anyway), and there really must be a better way to spend time during the first class (not to insult those who do this, it's just that I really don't think it's a good use of time).

So now, here's my usual first day experience.

The night before: nervous and excited, brain rolling with a zillion (ok, a numerical exaggeration) ideas, but none yet solidified or decided upon.

The morning of: my usual run before class, head clearing, ideas floating.

A few hours before: panic! I have to decide on SOMETHING! What to do? What to try? How to prepare?

Without fail, something floats to the top.

This winter quarter started exactly as described. About two hours before class, I decided to try a "learning graffiti" activity. I wrote out six different questions about learning ~ things like "What does learning mean?" "How do YOU learn?" "What is necessary for learning?" and posted these on large sheets of paper on the walls across

the lecture hall. I organized the students into groups of about 6-7 and had them go around the room, reading the questions, and “writing” on the walls ~ graffiti-style. Once each group had scribbled onto each “wall” they went around and read all of the comments. As I was watching them do this, I listened in, and the conversation was great! They were really talking about this! No silence. No “hey, what did you do over the break?” ~ they were really focused. It was fun!

Then, I had them take their seats and I gave them a prompt ~ a reflective writing assignment ~ asking them to reflect on what they just did, think about something they’ve learned in their lives (not necessarily an academic subject), to write about how they learned it, and to connect this to how they might learn biology.

I never had so much fun reading student writing assignments!

The second day, after I had read all of the reflections, I summarized key points on the board ~ things like “practice” and “doing” and “making mistakes.” I also pointed out that no one said “listening to a lecture and taking notes.”

I also shared with the class what an interesting group of people they are: all kinds of instrument-playing, multiple language-speaking, dancing-athletes fill the room. I said to them, “two of you, TWO, are state chess champions!” They looked around and smiled at each other ~ no longer a group of strangers, but a community of learners.

I posted the “graffiti” on the walls of the lab classroom, where they will be a visible reminder all quarter.

Now, two weeks into the current quarter, the students are asking questions, working with each other to answer them, showing an interest and comfort level I usually don’t see at the beginning of a quarter. The class is vibrant, enthusiastic, engaged. Did this activity have anything to do with it? Did introducing them to each other, talking about learning, sharing ideas about how to succeed make a difference in setting the tone for an active learning quarter? Who knows, but I do know it was a great use of the first half hour of class.

And the last 20 minutes? Well, yes, we read the syllabus together ... gulp, yikes, really!

**Week 2: January 25, 2015**

### Now What?

Is it possible to experience writer's block after only one post?! I have absolutely no idea what to write about...not because I'm out of ideas (thanks to a fellow blogger for providing a list that is quite useful!), but that I don't know which topic would logically come "second" after the first one, which, logically was about the "first day." Maybe my problem is that I am thinking too much about this, trying to have some logical progression of ideas (as if being witty and articulate and informative and entertaining isn't enough to worry about, now being logical has crept into my head)?!

Ok, so I am going to take a step back and look at this project for a second with a wide angle ~ what am I doing here?

The key word, to me, is "reflection" ~ a very internal process.

That's where I'm going to keep my focus ~ it's great to read what other bloggers are reflecting on and writing about, and I hope to read everyone's posts and comments at some point ~ but ultimately this project is about what I can learn about my own approaches to and experiences with teaching and learning. Then, by reading others' thoughts, I can incorporate new ideas and fresh perspectives to what I am doing.

So, what am I doing?

Well, I've started a notebook (I'm trained as a scientist, it's what we do, and something I secretly always loved about lab work ~ writing things down...I've never been able to break away from it, so, yes, I literally have a "teaching and learning" notebook). And, no, it's not electronic, pen and paper are my true passion. But I digress... Daily, I jot down random things ~ details about what I did in class, the order of events, the activities I tried, how the students reacted, etc... I try not be too critical at this step, just writing down information I can reflect upon, later.

So, upon reflection, what did I learn this week?



- I learned that if you tell students WHY you are having them do a particular thing, they generally respond well enough to at least give it a try, even if at first they think the activity is stupid or boring or whatever. Being secretive creates a “why are we doing this?” mentality that gets in the way of the learning opportunity. Why are we so secretive with our students?
- I learned that providing a welcoming environment and opportunities to build community include the teacher and take place all quarter long, not just on the first day.
- I learned that giving students time to think and encouraging them to “be wrong” is an important step in building their confidence. We know that this is a good thing, but we really need to say it aloud for students to hear the message, otherwise, their fear of “being wrong” will keep them from saying anything at all. It is only after this step we can start talking about what “being wrong” means ~ and why there is so much angst around it.
- I learned that I don’t have time, weekly, to read everyone’s blog AND the posted comments AND make comments myself. I am doing my best, and keeping good ideas in my T&L notebook. I hope folks know their thoughts and ideas are very much appreciated.

I admit, none of these are “rocket science” Ah-Ha moments ~ most are pretty obvious and straight-forward, but having a chance to reflect on things that went on in my classroom, to see these as learning points, is for me what reflection is all about. Some weeks, things run pretty smoothly and the lessons are subtle. But they are there, and reflecting is what brings them out.

That’s what I’m doing here.

## Week 3: February 2, 2015

### Ecstatic!

I had the most amazing thing happen this week and I am bursting to share it.

Last quarter, I had a student who did not pass my class (this is clearly not the ecstatic part of my story). I'll call this student, Elroy (because it's a fun name and totally made up). Elroy kind of bothered me last quarter, as he was as disengaged and disinterested as a person could be. I really want students to want to learn and when they don't seem to care, well, I take it rather personally. Perhaps this is something I should get over ..., but, I digress.

Anyway, since Elroy did not pass the class last term, he had to take it again. I was a little surprised to see him in class on the first day, but I welcomed him like all other students, obviously. Now, if you read my first post, you know that I did a first day activity focused on getting students to think about learning. This was not something I did last quarter, so for Elroy, it was his first experience with this activity. One thing I didn't mention about this activity (at least I don't remember mentioning it...) is that, after I read the student writing reflections, I commented on each one; giving each student advice about tactics and strategies that might benefit him/her, based on what was written in the reflection. To Elroy, who wrote that he learned best from doing it wrong the first time, I wrote that, although it was great to learn from mistakes, it was also not necessarily the best strategy for success, and if he wanted to talk about ideas that might help him succeed this time around, to please come and see me.

Well, guess what?

Ok, possibly you've guessed it, seeing as the title of my blog today is "Ecstatic!"

Elroy came to see me! It was my office hour of week 4. He came in and I said "Hi, Elroy. It's nice to see you. What can I help you with, today?" And he said, "You asked me to come and see you. And I finally made it." I wanted to hug him! I wanted to jump up and

down with joy! I wanted to holler “hooray!” None of these being very professional choices, I told him I was very happy to see him, to have a seat, and let’s talk. And we did.

I asked him what he thought “went wrong” last quarter. He explained. I asked him what he wanted out of this quarter. He replied. I told him what I thought he might try, different strategies that might increase his chances of success. I told him why I thought these tactics would work for HIM. I encouraged him to try out a few new things, see which fit, which didn’t, not to expect everything to work or to be to his liking, but to be open to learning what makes him learn.

He said he’d come again.

He was in my office hour again the next day.

I don’t know how this will turn out, but I do know that I re-learned a very important lesson from this ~ students DO want to learn, whether they outwardly appear to or not. I should never, ever decide a student “has the right to fail” until I have reached out to make sure that, failing, is, in fact, his/her goal. It matters that I be approachable, encouraging, and that I let students know I do care if they succeed.

I hope Elroy keeps coming to my office hour.

And I hope to remember not to call him Elroy!

**Week 4: February 9, 2015**

### [Collaborative Testing ~ A Report](#)

Ok, I’m \*warning\* you that this post is possibly not going to be very interesting to everyone, as it is a “how to” and “what I learned” kind of post about, get ready, TESTING.

For those of you still with me, let me describe my class and how testing fits in.

I teach biology for majors. You can imagine there is a lot of content that students are expected to know, and assessing this content knowledge with a test is one way to measure what students know. Now I think we all can agree that tests are a “necessary evil” (please, for those who disagree, share your thoughts!) in a class such as mine, but I’ve always subscribed to the belief that everything is a teaching and learning moment, and this includes tests. In other words, I want students to learn from a test just as much as I want to see what they’ve learned from a test.

Still with me?

Here’s where “collaborative testing” comes in. Studies have shown (I do have a good reference for this, but forgive me not including it here, as it is Sunday night and I have been doing way too much this weekend to search for the link) that students who do collaborative testing show longer term retention of material than students who do more traditional testing. Although “long term retention” is not the only goal of learning, I would like to argue that in my subject it does come in handy, especially for majors.

Here are the logistics: my exam is a combination of multiple choice and written questions. Sorry, I’m not even going to entertain discussing the merits, or lack thereof, of multiple choice questions, let’s just accept them as another necessary evil. On exam day, students are given 60 minutes to answer, individually, both the multiple choice and written questions. They then turn in their answers to the written questions and take a short break. During this time, I organize the students into groups of 4 (randomly, but I try to mix them up by different lab sections so they have to work with new classmates each time). Students then have the rest of the class period (this is roughly another 45 minutes) to work collaboratively in their groups of 4 to answer the multiple choice questions a second time. They are allowed use of their class notes and text and have access to the internet. Now, some of the questions fall into the “knowledge/comprehension” category and should be completely answerable by everyone who knows how to look up information. But many of the questions are “application/analysis” or “synthesis/evaluation” type and these are much more difficult to

answer without reasoning through the content. This is where the real fun begins. Students talk about what they know, what they need to know, and why they think a particular answer is correct. Group mates don't have to agree on an answer, as they are each turning in a second Scantron, but they really like to argue about what answer they think is correct.

I have been doing this "second Scantron" for years, now, but this term I organized it in quite a different way: having students take the exam again right away (versus about a week later), assigning students into groups of 4 (instead of having them self assort into a few large groups), and making the second Scantron worth 50% of the first attempt (rather than equal value). I feel this set up is the right balance between using the exam as an assessment tool and using the exam as a learning tool ~ we all win this way!

Here's the feedback I heard from students ~ "wow, this was incredibly helpful" and "I can see how this will reinforce what I do (and do not) know" and "this was so fun, I really learned a lot." Even though they may have realized they didn't do as well on the individual attempt as they had hoped, they were happy to have had a second chance to learn more and earn a few more points. This is a little different from feedback I have heard in the past, which focused solely on the perspective of earning extra points. I think having the students in small groups of 4 made each of them responsible for participating in the second Scantron (it IS called COLLABORATIVE testing, after all). Before, when the students worked in larger groups, several students just wrote down the answers that other students had hashed out, without thinking at all through the material. While this earned them extra points, it likely did not contribute to any long(er) term retention. I also like that, by being in random groups, students really were forced to interact and learn from each other. I use collaborative learning in many ways in my class, it seems natural to have collaboration during a test.

Thanks for sticking this one out to the end!

**Week 5: February 16, 2015**

### EEEEEE (Five Es)

No, this is not the sound one makes while screaming downhill on a bike, or skis, or a roller coaster (well, I guess it IS that sound, but not what this post is about...).

Close your eyes ... wait, that won't work ... ok, keep them open while you read through this, then close them.

Imagine a time when you were a STUDENT (any age, any grade, any class) and you had a really awesome learning experience. Recall as much as you can about this memory. (Close eyes now and think, then reopen and continue).

Ok, now do it again, only this time, think about a really negative learning experience. Again, see what you can recall about this experience that made it so. (Close eyes and think again).

Grab a pencil and paper (oh, drat, so old school) and brainstorm (write down) all the reasons why you remembered the first experience so fondly and the second not. What were the subjects? Who were the teachers? What was the teacher doing that made the experience positive/negative? What were YOU doing that made the experience positive/negative? Why do you think you responded positively/negatively in each case? How do you think you might respond today, given the same circumstances in the classroom?

What was the point of this exercise?

Frankly, it was to prepare you for my post on the Five E (EEEEEE!) model of instruction (<http://bscs.org/bscs-5e-instructional-model>). This model was developed in, gulp, 1987, by the Biological Sciences Curriculum Study and something (shamefully) I have only recently learned about. I am actively engaged in aligning each teaching/learning experience in my classes with this model and I thought I'd share a little about the model in this post.

First, the basics.

The five Es stand for: 1) engage, 2) explore, 3) explain, 4) elaborate, and 5) evaluate.

The order in which the different components of this instructional model are applied during a “lesson” is key ~ as the model was put together based on studies of how people learn. First, people have to be ENGAGED in the material (they have to care and be interested in what’s coming). Second, they need to be active learners, EXPLORING a subject before any EXPLANATION occurs. Next, they must be given a chance to apply what they’ve learned, allowing them to ELABORATE on their knowledge before they are, in any way, EVALUATED on what they’ve learned.

You can imagine a lot of thought goes into the design of each element, and multiple possibilities exist for each. One of the fun things about applying this instructional model is coming up with new ways to engage students, more effective ways to explain things, and more valuable evaluation methods (for example, asking students what the muddiest point was during a topic is very illuminating and often helps steer the next lesson).

There is no way to be bored, as if that could really ever happen in teaching, when one works with the 5Es, as it keeps the teacher fresh, constantly evaluating and revising and creating.

If you are interested in applying this process to your own classes (or, if you aren’t a classroom teacher, this method works well with meetings, too, try it!), an excellent paper on the subject is: “Order Matters: Using the 5E Model to Align Teaching with How People Learn” by Kimberly Tanner. *CBE – Life Sciences Education*, Vol 9: 159-164. Fall 2010.

Now, before we finish this, go back to your brainstorming lists. Can you find the 5Es somewhere in your list recalling the positive learning example. Do you see any of the 5Es missing from the negative example? Were the 5Es there, but in the wrong order? How might you take these positive/negative experiences and apply what you’ve learned from them to your classrooms?

Try it ~ the best trick is to pick a lesson you already like, identify the 5Es, and reorder them. Or, add an engagement activity before each lesson.

I'd love to hear how it went!

And, yes, this post was very EEEEE!

**Week 6: February 24, 2015**

### [Keeping Positive When Feeling Negative](#)

I promised myself I wouldn't use this blog as a place to vent or complain. I don't want to give the impression, to myself or anyone out there reading, that I am "one of those teachers" who always blames her students when things go wrong (or, maybe I should say, less right).

But the simple fact is, some days are harder than others. Today was one of the harder days, and so I am going to start right away by NOT putting the blame on my students, whining they are unprepared or unmotivated or lazy or whatever ... instead, I am going to reflect on what happened and why I don't think it was an effective teaching and learning day. Then I will look at ways to do it differently next time, in the hopes the outcome will change.

So, what happened?

Well, we started a 3-day lab today on the molecular biology of genetic disease, with special emphasis on the techniques used to diagnose genetic predisposition to cancer. Normally, I consider this one of the more interesting topics for my students, even if it can be a bit challenging at the start.

I haven't liked my lab presentation for a while, now, so I completely revamped it ~ moving things around, getting students to think about what they know (or think they



know), having the students work in groups on a few basic questions, presenting a bit of clarifying information, and then setting them loose to set up the lab.

The entire session was a flop, from start to end.

First, the pre-lab discussion fell flat. I WILL partly put the blame on the students here ~ as only TWO actually did the pre-lab at all! Without their answers to spark discussion, there was really only dead space filling up the room. I realized I started to fill that dead space with a lot of lecturing ~ something I really try to eschew as much as I can, especially in a lab...so that put me in a bad space. Then I got a little cranky and snitty with them for not coming prepared. That just ended up making bad into worse. So, next time: emphasize that the pre-lab questions will be used as a discussion starting point and they will be expected to have them completed prior to coming to class. Send a reminder, something, anything to get them to come prepared. Ok, some of you are likely disagreeing with me now, after all, a pre-lab means just that: done PRE lab. However, most of our pre-labs were set up differently and perhaps because I intended this one to be part of a conversation, I should have made that more clear. Besides, I am reflecting on things I could do to make this work better next time, so this is something I could do (hey ~ next time is tomorrow for my second section, I'm going to remind the students right now...). Ok, I'm back (seriously, I really did just email them).

Next, the group work was a disaster. Everyone worked completely on his/her own ~ this is so unusual for this class, they are really very interactive, so I was surprised. And because I was surprised, I didn't know what to do about it, so I did nothing. I just let them work on their own and then we regrouped as a class. Since my intent was to have them work together and learn from each other, next time (ah, tomorrow!) I will have them work in PAIRS. A table of 4 is much harder to "force" into group work, but a pair is pretty hard to avoid doing so.

Lastly, my clarifying information explanation came at the wrong moment in the class. This is an easy fix ~ I can put it after the lab set up, when the information might make a little more sense (remember those 5Es from last time ~ order matters)!

In summary, I learned there are things I can do to try and stimulate learning in my students ~ if at first I don't succeed, well, duh, what else is there to do, but try again? I guess today was an ok learning day, after all. For me.

## **Week 7: March 3, 2015**

### [Totally Worth It](#)

I thought this last post should be \*astounding\*, but who needs the pressure?

I think, instead, I will reflect on something very simple that I tried (with great success) in my lab class last week.

If you have been following along, this was the same 3-day lab where I had a disastrous (my words) outcome after the first day. Big flop. Frustration. But I dusted myself off, learned some good lessons and moved on. Day 2. Literally in the shower (ok, maybe TMI) that morning, I had an idea for something new I could try that I thought would be better than what I had been doing in the past. So, you see, I wasn't gun-shy or permanently damaged from my other attempt at this just the day before!

Let me set the stage.

The students are very busy getting several lab procedures accomplished until, towards the middle of the experiment, there is a wait-time of about 45 or so minutes. In the past, I have used this time to give some explanation (yes, that means lecture) on restriction enzyme digestion and gel electrophoresis. Riveting, I know. My brilliant in-the-shower idea turned the explanation around (ah, there are those 5Es again) and I designed an "explore" activity using an English sentence as a string of nucleotides in DNA and subtle changes in the sentence to reflect mutations. The students had to physically cut (with real scissors) their sentence into smaller fragments, depending on which words were mutated and then they had to compare their sentences with others in the room and answer some questions about the whole process. I thought this would clearly illustrate

the concepts we were covering and “kill” some time while the students waited for their experimental results, but I did not think they would have so much fun with it (remember kindergarten ~ having fun cutting and pasting ~ we never really outgrow that, do we?). But, without a doubt, the best part were the comments I overheard while they were working on this. Things like “OMG that totally makes sense” and “I never understood this before, now I totally get it” and, once, even, “that was totally fun.” (You can see that “totally” has not gone out of fashion ~ which I think is funny, since I totally used to use this word when I was younger...ah, I digress).

Ok, the point is this ~ give the students the chance to investigate something, even if it seems minor and simple, because it has a powerful effect on their understanding. Don't just resort to explaining something to them to “get it covered” and hope they pick up on it. Don't give up trying new things, because some will fail but others will not.

It's wonderful to see, from this blog activity, there are many like-minded people out there, trying to improve teaching (and, by extension) learning in small, sometimes subtle ways, trying new things and learning from the positive and negative outcomes, and sometimes succeeding in being totally astounding!

**Week 1:** January 15, 2015

Empathy and Expectation

*“Teaching lessons is not only following strict guidelines but it is also about taking time to understand people’s fears and struggles in life.”*

– M\_, community college student

I became a teacher of composition because I believe in the power of language, the desire to help students grasp that power, to communicate, to articulate themselves as engaged citizens. At the same time, I’m cognizant of my responsibility to help students master “standard written English,” to meet the standards toward what lies beyond and yet diligent, when necessary, about our obligation to block their way.



Institutional space

Perhaps this is what has always kept me at a certain arm’s length from my students. I know and care that they have lives outside of my classroom, but when I receive that email telling me that they will miss class (again! And it’s only week 2!) because [their car broke down, they missed the bus, they need to take care of their younger siblings, they have the flu, they have a court date. . . ], my first reaction is not empathy; it is a worried

frustration – a knowledge that every time their personal life “interferes” with their academic life, they take a step backward from “success.”

I started this quarter with a goal to better what I think of as my "human skills" as a teacher, and my starting point is empathy. I suspect that what this will require is a certain calm, an ability to “let go,” not of my expectations and high standards, but of the stress and pressure I often feel myself and then create for students to meet them. Over the weekend, I read introductory essays from my composition students. M\_, a swim instructor and lifeguard, had this to say about what his job has taught him: “Teaching lessons is not only following strict guidelines but it is also about taking time to understand people’s fears and struggles in life.” Indeed, these are the words that will guide my practice as we begin a new quarter.

**Reading-Writing Connection:** When teaching summary writing, I teach what Peter Elbow calls “the believing game” – an ability to step into the shoes of another in order to understand their perspective, their purpose, their motivations, and to articulate their ideas without bias or judgment. The *human skill* this requires is EMPATHY.

**Week 2: January 30, 2015**

### [The Goal is Levitation](#)

In my 242A/B Portfolio Management course, I teach students how to reflect. The concept is not new to them – many keep personal journals. But for many, it’s an uncomfortable endeavor, writing meaningful reflections that dig deep into their learning processes, their attitudes, and their behaviors. To me, reflection is intuitive when it focuses on the past. We experience something at a moment in time, and later, we look back to consider what meaning that moment had for us and what we might learn from it. Then, we look toward the future. What are my goals for next week, next month, next year?

Less intuitive is a reflection that focuses on the present. How do we observe closely, in the moment, our own attitudes and behaviors? And more challenging, how do we analyze those attitudes and behaviors in time to adjust them in the moment, rather than look back on them with regret at a later moment in time?



To illustrate the idea of reflection in the present, I gave a student, J\_\_, a ball of Play-Doh. I asked the rest of the class what they would like him to make with it. They shouted out ideas, and though they first set the bar a little low (“a rock!” “a heart!”), they finally settled on “a horse!” I told J\_\_ to make a horse with the Play-Doh, but while he made it, he had to explain what he was doing at each step and why.

Through this exercise, we could see him make decisions similar to those we might make while we’re writing. For example, when he decided to make his horse 2-D instead of 3-D, this compares to how we might frame and focus an essay. We watched him start one approach (e.g., to create legs for the horse), see that it wasn’t working, and then change his strategy. Finally, we watched him make decisions about what to “cut” when he was given a hard deadline. These are all things we do in writing. The more we can be aware of this thought process *in the moment*, the more efficient and productive we become to tailoring/adjusting our strategies as *we write*. Metacognitive awareness while reading is a bit more challenging, since many of us read as if we’re “receiving” information (as opposed to “creating” something when we write). We don’t perceive that we are *doing* something while reading, but in fact we are. Just like writing, we begin with a purpose or a goal, we identify a strategy for meeting our goal, we encounter challenges/difficulties, and we adjust our strategies as needed.

After our class, I decided to practice my own metacognition during a Bikram yoga practice. This is a 90-minute series of 26 yoga poses done in a room that is heated to 105 degrees. I often get overheated and overwhelmed, making this a practice of intense concentration, of mind over matter. For this particular practice, I paid extra attention to my *thought process* as we went through the poses. Here's what I noticed: I entered the studio with a goal to do all 26 poses, without a rest, without leaving the room. About 20 minutes in, this felt overwhelming – the goal itself started to weigh on me, to distract me. So I adjusted my goal to *just stay in the room*. I gave myself permission to rest for some poses. To prevent myself from getting discouraged, I *forgave myself*, reminding myself that meeting a more reachable goal was better than giving up.



*“The ultimate goal is levitation. So let go of the goal.”*

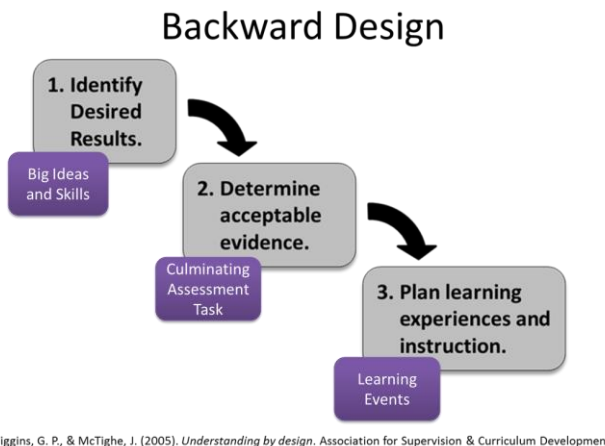
A long time ago, at a yoga class at the gym, someone demanded of the instructor very aggressively, “what’s the *ultimate goal*, what’s the *ultimate goal*?” The yoga instructor responded in a very calm and quiet voice: “The ultimate goal is levitation. So let go of the goal.” In other words, focus on the *process*, and focus on improvement. Do the best you can in that moment, and do it with integrity. In time, that ultimate goal will appear within reach.

**Week 3: February 1, 2015**

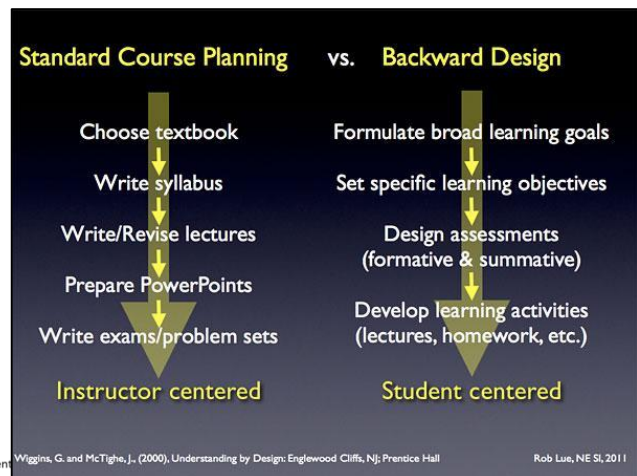
## Levitation and Backward Design

At an acceleration conference last year, an English instructor described an English classroom in which the students read a text (a book, an article) in response to which they would later write. This instructor did not create a writing “prompt” beforehand. He did not come in to class with prepared questions. Rather, he let the students drive the conversation, determining the elements of the text on which to focus, to question, and to explore. His role was to challenge them in this exploration, to probe them to deeper levels of engagement. He described moments in this classroom when the students would touch on a particular aspect of the text, and together they would discover a potential thesis argument for an essay.

What he described kind of blew my mind. It sounded like an incredibly engaging and engaged class – the kind of learning environment I have always strived to create. But how he created it seemed to go against the very pedagogical foundation of my teaching: backward design.



source: moodle.chatham.edu



source: www.nyas.org



Popularized by Wiggins and McTighe, backward design, also known as backward planning, shifts a traditional “instructor-centered” approach to a “student-centered” by which an instructor begins with a set of learning objectives (knowledge and performance), determines a summative assessment that provides evidence of learning, then designs and scaffolds lessons, activities, and formative assessments that help students progressively work toward the objectives. The idea is that course design focuses “on the goal (learning) rather than the process (teaching)” ([edglossary.org/backward-design](http://edglossary.org/backward-design)). In my composition classroom, the summative assessment is always a formal academic, thesis-driven essay. I design an essay prompt, I determine what skills (reading/writing) will be necessary to respond to the prompt, and then I design and scaffold a series of lessons and activities that will help students develop those skills. Ask any composition instructor, and he or she will likely tell you, the **prompt** is one of the, if not the, most important pieces in the equation.

In my previous article, I shared a metacognitive experience I had during a yoga practice. If we expand our conception of reading and writing beyond the scope of our own classroom, indeed beyond the scope of our own institution, isn't “levitation” the goal? In reflecting upon that, my point is not to undermine the learning outcomes we've established for our students. They are, of course, important in helping students navigate increasingly challenging courses in their educational path. But if, in backward design, we are privileging “the goal (learning) rather than the process (teaching),” I now wonder whether we have not lost sight of the **process of learning**. To what extent can we make explicit the outcomes, and then guide students to **discover** the various paths to achieve them? And to what extent can we then allow our own instruction to be guided by student discovery – to take not a backward-design approach to teaching, but a forward-design approach to learning?

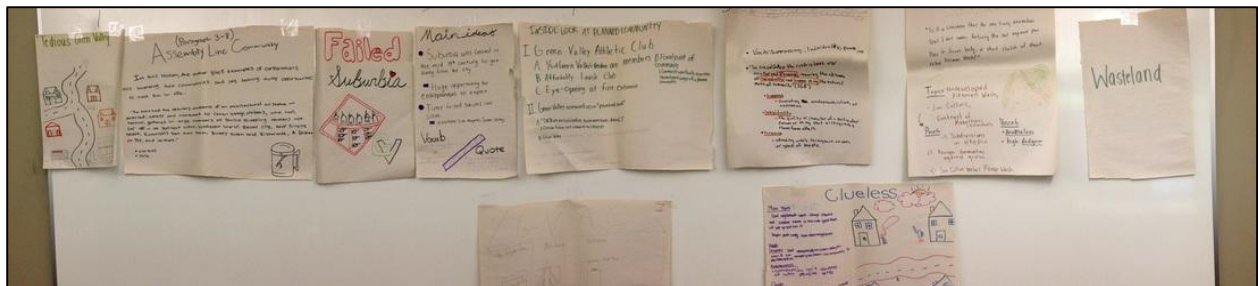
Baby steps: this week in class, we begin a new essay unit, and I have not yet written the prompt. I'm looking forward to *learning* what my students see in their first reading.

**Week 4: February 7, 2015**

## Collaboration is Key

In a student-centered workshop model, collaboration is key, and students are the keys to successful collaboration. While we set up guidelines and processes that encourage effective collaboration, this is a communication skill that is difficult to teach. I think we've all had a class or two in which we've observed outstanding models for failed collaboration - awkward silences, reticence, dominant personalities, lack of interest (in the task and in each other), lack of accountability. The truth is, collaboration requires a certain type of individual, someone who is ambitious yet patient, encouraging and empathetic, someone able to navigate diversity and idiosyncrasy.

This week, I watched these skills in action during a critical reading activity on David Guterson's "No Place Like Home." I asked students to work in pairs, and then I assigned each pair a section of a longer article. The pairs were to create a poster on their section, including: a heading/title, the key topics and claims, one selected quote, two vocabulary terms, and an image that captured the section. At the end, they would present their work in order to help the class visualize the ways in which a writer can structure an argument.



At the beginning of the activity, I told them I was going to "mix them up" so they would work with someone they don't normally sit next to. During this activity, I did not coach any of the students on how to work together; I didn't need to. Every once in a while, a certain class comes along - a group of students each of whom individually possesses the human skills necessary for collaboration, and who together create their own

community. This is one of those classes. I observed students asking their partners what they thought and showing appreciation for their good ideas. I observed them helping each other see things in the text that they didn't see before, to problem-solve challenges. Later, when presenting their work, I observed them share responsibility for speaking, respectfully acknowledging their partner's contributions. I observed them broaching the work with enthusiasm, integrity, and a little bit of laughter. This is what effective collaboration looks like, and I'm learning so much from seeing it.



**Week 5: February 15, 2015**

### [Beautiful Evidence](#)

This week, I had the opportunity to attend a one-day class/presentation by Edward Tufte, a statistician, artist, and Professor Emeritus of Political Science, Statistics, and Computer Science at Yale University. Several people have told me over the years about his work in information design and data visualization, and my growing interest in visual rhetoric as it relates to English reading and composition prompted me to take the course, which included several topics, including design strategies for information displays; spectatorship and “consuming” reports; and “cutting edge” visualizations as models. The class left me with so much to think about – about reading, about writing,

and about teaching. I know that it will take time to digest it all and fully think through how I might apply it to my own practice. Some thoughts, in “dialectical journal” format:

***Design strategies for information displays: sentences as a “design strategy” for data presentation.***

Tufte used a NY Times article as an example of how often and straightforwardly data is presented in simple sentences.

For example, a recent article, “Health Care Opens Stable Career Path, Taken Mainly by Women,” we see the following: In 1980, 1.4 million jobs in health care paid a middle class wage: \$40,000 to \$80,000 a year in today’s money. Now, the figure is 4.5 million. The pay of registered nurses — now the third-largest middle-income occupation and one that continues to be overwhelmingly female — has risen strongly along with the increasing demands of the job. The median salary of \$61,000 a year in 2012 was 55 percent greater, adjusted for inflation, than it was three decades earlier.

His point was that data need not be presented in an unnecessarily complex “design,” that data is read and digested easily as a part of our natural language. Having just done a lesson on distinguishing facts and opinions, with a follow-up activity on how to incorporate/integrate data as evidence, I found it interesting to consider the sentence as a “design strategy” for data presentation.

***Principles of analytical thinking become the principles of information design. There is a “symmetry” between presenters and consumers – both are reasoning through data and information.***

Tufte stresses that the goal of information design must be, at its very core, analytical thinking. That is, the point of information display is to think critically, to reason about information. When we “visualize” information in order to “dumb down” the information, we do a disservice to our audience. Tufte refers to presenters in industry, but his ideas apply to teaching and pedagogy. It makes me consider the ways in which I present information to students. Tufte is notoriously opposed to PowerPoint in particular, believing that it is a tool for the presenter, not for the audience. We use PowerPoint to control the pace of information dissemination; we reduce information to bullet points,

and we share them slowly, one by one, in the “slow reveal.” I am guilty of this, I admit. Tufte comments that audiences seek the information that is relevant to them in that moment. So the “slow reveal” is, in some ways, an attempt to control one’s audience, to determine what information they consider and when. As an instructor, I do this to “scaffold” information, but I wonder to what extent I really do this to maintain an element of order in what is ultimately a chaotic learning endeavor. That is, learning is not always “hierarchical” nor linear. In reading and writing in particular, it is recursive, it’s networked.

Spectatorship and consuming reports: assessing credibility of a presentation and its presenter – cherry-picking, reasoning alternative explanations. Credibility is reputational.

Tufte discussed how presenters establish their credibility, noting the tendency to “cherry pick” information/data toward a particular end, and noting that audiences recognize when this is happening and form judgments accordingly. Having just taught MLA documentation, how validating it was to hear how our lessons in academic integrity and ethos apply in the “real world.”

***Avoid the “rage to conclude.”***

I absolutely love this idea. Tufte was referring to presenters in the context of “cherry picking” information in order to support a singular argument, when credibility is heightened when we reason through alternative explanations. This reminds me of the “Rogerian” arguments I encourage students to craft. The common pro/con, yes/no, agree/disagree argumentative essay is in many ways a “rage to conclude.” We force students to “take a stance” but ambivalence in many ways is a sign of critical thought. Invitational arguments encourage discovery and exploration.

“Walk around and see directly what you are seeking to understand.”

My current pathway course is designed around a theme of “seeing and writing,” with a focus on visual rhetoric and an approach to reading, writing, and metacognitive reflection as a form of observation. So this idea resonated with me. I’d like to do this

better – to encourage students to “see directly what [they] are seeking to understand.” How do we connect the classroom to the outside world? How do we bring the outside world in to the classroom? Service learning, contextualized learning, learning communities, ethnographic observations, interviews. . .

## The Cohen Connections

The top hedge fund SAC Capital agreed to plead guilty to insider trading and pay a record \$1.2 billion fine. At least eight current or former SAC employees have been convicted or pleaded guilty to insider trading. FEB. 6, 2014

INVESTIGATION	CRIMES BY TRADERS	TRADERS' CONNECTIONS TO STEVEN A. COHEN
Suspicious trading reports; emails with secret data from an industry expert.	<p><b>GUILTY</b></p> <p>Mathew Martoma had SAC sell shares of Elan and Wyeth after getting insider tips that clinical trials were not going well.</p>	Cohen, SAC's founder, has not been criminally charged, but faces a civil administrative failure to supervise action.
Wiretap of a tech expert at a company known to traffic in illegal information.	<p><b>BOTH GUILTY</b></p> <p>Donald Longueuil (top) and Noah Freeman admitted to taking part in an insider trading conspiracy involving technology stocks.</p>	<p>Said to have collaborated with Cohen on questionable drug-stock trades.</p> <p>Managed a portfolio of technology stocks for Cohen.</p>
Raid of two hedge fund offices finds "circle of friends" trading insider tips about the tech sector.	<p><b>GUILTY</b></p> <p>Jon Horvath passed confidential financial data about Dell and Nvidia.</p>	<p>Has said he believed his job was to provide Cohen with secret data.</p> <p>On a team that traded technology stocks for SAC.</p>
A government informant recorded incriminating phone calls and meetings.	<p><b>GUILTY</b></p> <p>Michael Steinberg, who was Horvath's boss, denied he traded on that information.</p>	<p>A 15-year employee of SAC who worked closely with Cohen.</p>
Emails revealing insider trading.	<p><b>GUILTY</b></p> <p>Wesley Wang admitted to passing illegal tips about semiconductor stocks to a former portfolio manager.</p>	<p>An analyst at Sigma Capital, a unit of SAC.</p> <p>Cohen hired Lee despite Lee's reputation for insider trading.</p>
Suggested trades based on inside information while at SAC from 1999 to 2004.	<p><b>GUILTY</b></p> <p>Richard Lee, a former SAC employee not previously named by prosecutors, admitted to insider trading of tech stocks and is cooperating in the case.</p>	<p>Tried to get rehired at SAC in summer 2009 after he began cooperating with the investigation.</p>
	<p><b>GUILTY</b></p> <p>Richard Choo-Beng Lee, a former SAC research analyst, pleaded guilty in October 2009 to insider trading. He cooperated with the investigation.</p>	

**Week 6: March 1, 2015**

## Feigning Stupidity

*“My hypothesis: college instructors are predisposed to be “tellers.” I confess, when I first began my teaching career I was right there, myself –*

*a student would ask a question, I would tell them the answer. When I've had occasion to do peer-evaluations for colleagues, I often see them do the same." – Carolyn H.*

This reminds me of my own interview for Foothill. I had mentioned that my philosophy of teaching was student-centered, that I designed my class in a workshop model. I was asked what "percentage" of class time was spent doing group work and what "percentage" was spent in instruction. I was confused by the question.

Group work, when thoughtfully designed, is instructive. Students are asked to struggle, to be confused, to reason through that confusion. Instructors are there to guide, to ask questions, to challenge. It's surprisingly difficult work - to refrain from providing an answer. It requires us to de-center ourselves in the classroom, to give up control, but also to give up some of our ego. I read once that a really good teacher knows how to feign stupidity. I like this idea. "Ms. Fong, what does this word mean?," a student might ask. "Hmmm... I don't know. What guesses can we make based on context?" This is time-consuming work, to be sure.

Part of giving up our ego is also giving up what we believe to be the "right" answer. As critical reading instructors especially, while we do need to ensure that students are not misunderstanding an author's intentions and main points, we also open ourselves to interpretations we are not expecting. I'm constantly reminding myself that by the time students have read a text the first time, I have read it 10, 20, maybe even 50 times. I do this so that I'm prepared to help them "understand" it, but sometimes this biases me to an "expert's" understanding of it. Is that the goal - to share my own "expert" understanding of the text? Or is my goal to help students discover their own knowledge within it? When we have an answer in mind, we are disappointed when students don't respond according to our own expectations. This is when we are most inclined to be "tellers."

**Week 1:** January 6, 2015

**[7x7x25 #1: Inspiration From DOD Schools](#)**



Last week while returning home from Middlefield, a story produced through Breaking Ground on KQED caught my attention...so much so that I sat in the driveway until the end, a practice my brother and I used to have when we arrived home from our long school commute, listening to NPR. I digress. The piece was "[Department of Defense Schools](#)." It highlighted these schools' great successes—and how DoD has

contracted Rand to research how to best reduce them and their expenditures as many of them are in great need of repair. Closing them is, to me, a head scratcher as I'll explain below. Forty have already been closed in the past eight years, sadly.

Claire Smrekar's journey began when Congress asked that she study DoD schools for one year—quite the challenge since there are 180 across the world. A professor of education and public policy, she assumed that students' success was founded in discipline and rules. However, she learned that even though students are guaranteed safe housing and have at least one working parent, they also experience great instability by moving from base to base on average every three years. As an Army spouse, I'm familiar with the timeline but still have to wonder how they succeed.

The first factor she notes is that there is a high retention rate among the teachers at each school. So, even if the students are navigating a new place, the teachers certainly aren't. In other words, the blind aren't leading the blind, for lack of a different expression



at the moment. Other factors? The schools have more money to spend per student and some of the curriculum is the same at any level in any DoD school, creating curricular consistency when the kids base hop. The teachers and staff also understand deployments and their emotional effects well and can support students whose parents are away—a challenging situation for a child. Also, the schools rely on parents to address disciplinary issues at home, and their child's behavior is linked to their job performance. Finally, what struck me is that, while I've been part of countless conversations on campus regarding minority student success and persistence, African American students, according to the article, perform better than their peers nationally than other students.

What connections, if any, can we make from these schools to the community college system? I'm not assuming that performance be tied to family members' employment. 80% of the students at Fort Bragg's DoD school are low income. Foothill's students certainly don't reach this percentage, but we do have many low income students who struggle to find housing. And how many of our faculty are "freeway flyers," teaching at multiple campuses and spending little time congregating outside of class? As a former freeway flyer, this isn't a criticism; it's a reality. How can we create a campus community in which all students can achieve success, regardless of race, gender, religion or socioeconomic background?

I hope that Congress, educators and other government officials will take to heart Smrekar's findings when considering not only other schools' performance nationwide but also when closing high performing DoD schools and its surely detrimental effect on military children. And with presidential attention on community colleges, let's hope more funding comes down the pike to hire more full time teachers; create learning communities to welcome and retain all students on campus; maintain educational resources, and create more career and academic support for them.

**Week 2: January 26, 2015**

### [Supplemental Instruction: A Brief Explanation](#)

Supplemental Instruction is not a new concept to me—I’ve been living and breathing it, in some form, for 19 years. If we call it simply “tutoring,” which isn’t really accurate as it is offered on campus, it becomes more familiar. After all, tutoring has been offered officially in the U.S. since 1640, when Harvard employed what’s known to be the first peer tutor in the country (though I’m sure there were some off the books).

As I promote the Teaching and Learning Center on a daily basis, I have to stop myself at times mid-conversation to explain the field of SI to some faculty and staff (and students, too!). SI is a general term for academic help directly related to a course. It can have multiple iterations—so many, in fact, that the term can cause confusion. And why shouldn’t it? The word “tutor” originates from the Latin “tueri,” meaning watch or watcher, but I don’t consider myself a professional watcher! So let’s explore SI a little.

If you conducted an Internet search for SI, the browser would most likely take you to Missouri. And then immediately back to California. UMKC founded a program called SI in 1973 as a response to another form of SI: Learning Assistance Centers. (For more info, read [here](#).) LACs actually originated at CSU Long Beach. An LAC has six main goals: to offer tutoring in a central location, refer students to other helpful campus resources, to help students earn higher grades, to train tutors and tutoring professionals, to offer basic study skill assistance and to serve as a center for faculty development. The TLC at Foothill shares similar goals, though I dislike emphasizing an improvement in grades; whatever happened to learning to expand your mind and your life? That’s another blog post. I am always happy to hear, of course, when students succeed after receiving tutoring but always tell my tutees that I have nothing to do with their grades.

Back to SI. In 1973, UMKC decided to modify the support that they would offer by choosing peer tutors who had taken a course that has a historically high rate of failure

and have those tutors help students in those courses. This method has proven successful time and again in helping reduce withdrawal and failure rates. The UMKC model is very well known, though not without challenges faced in an LAC or in the TLC. At Foothill, we have piloted a model similar to UMKC's called Embedded Tutoring. The pilot is currently offered in 5 of the top 10 or so courses with the historically highest rates of failure on campus. What's one advantage the peers have over, say, a faculty member who is working in the TLC? The peer, in this case, has taken the course from start to finish and made an excellent grade. S/he knows the instructor and what to expect from the assignment and how to meet the instructor's expectations. In the TLC, we faculty more than likely haven't taken the class, though we may know the instructor and the assignment. In that regard, the Embedded Tutor could be at an advantage in terms of familiarity.

What is key to the success of both programs? Explaining to faculty that we supplement their instruction; we don't replace it. Explaining to them the value of SI: sometimes students need to hear something multiple times and in different ways to process an idea and acquire it as knowledge. In SI at Foothill, we converse. We answer questions. We give tips on time management and assignment planning. We explain concepts and theories clearly and tell whether the student is understanding and explaining them accurately, and why or why not? We give pep talks when needed and referrals, too. We talk about life and jobs and culture and more. Sometimes we cry, but mostly we laugh, and we are certainly not merely watchers, though we do watch at times.

Si contributes to creating a community, and, at Foothill, offers free support to help students achieve their academic dreams. Maybe one day that will be what you see in a search engine keyword inquiry.

**Week 3: February 2, 2015**

### [Competency Based Education: Part I](#)

{This weekend, I planned on writing about the glories of online education that also happens to be competency-based. However, my laptop has decided not to work, and writing an entire blog post on my iPad is a bit onerous; therefore, I will write as much as I can and will add links, etc...tomorrow.}

In 2007, my husband, an Army officer, and I were assigned to move from glamorous “L.A.”—Lower Alabama—to a base in South Korea for three years. We were so excited as it is his birth country and we’d be able to visit his family and travel throughout Asia. But I’d wanted to return to graduate school for a couple of years and had decided to move from Spanish to ESL. Both are fields in Second Language Acquisition, which greatly interests me, and while the foreign language jobs were decreasing, jobs in ESL were burgeoning. Korea would offer ample opportunity to teach EFL (English as a Foreign Language); all I needed was a Master’s program. Online or distance or flexible.

I wish I could remember how I learned of Western Governors University,” but I’m pretty sure a fellow Army spouse gave me a flyer she’d be given on post. Anyway, skeptical of online for-profit schools, I tried to research the school online, but there just wasn’t much out there about it. A couple of news articles and the homepage stated the not-for-profit school had been created by several governors of western states to increase accessibility to student populations which might not have time or resources to move and stay at a brick-and-mortar school for a year at a time. Okay—that was me back then, so score for WGU. I scoured through university published materials about the program content, trying to be as informed as I possibly could. All materials were easy to find, clear, cohesive, and informative, and the curriculum seemed sound and whole. I called WGU to ask a page of questions I’d prepared, sat on the idea of a fully online degree for a few weeks, discussed with my family, and took the plunge.

WGU sets benchmarks and bases students' progress on their mastery of a given subject. What does that mean? A student is given not a syllabus, but a course packet at the beginning of each course that details all assignments to be completed and all SLOs. The material is broken into multiple assignments, all of which are broken into chunks, not steps, as that would certainly decrease the critical thinking component. Assignments include reading, researching, writing essays, posting in discussion forums, and on and on.

**Week 4: February 9, 2015**

### [Competency Based Education: Part II](#)

Last week, I started writing about competency based education. Little did I know, I'd caught the flu and just couldn't finish it as I'd intended: I wrote about the convenience factor necessary for a military spouse to complete a degree without explaining how necessary a cohesive curriculum and friendly interface are in an online program.

Maybe you're all familiar with multimodality pedagogy and maybe you're not. I hadn't really given online courses much thought before WGU, but I was very tech savvy and had even done some html coding for second language acquisition courses as an undergraduate. But WGU was impressive—even in 2008.

As I explained last week, any student can register and complete a course within a term at his or her own pace. But each and every student is required to take EWOB, Education without Boundaries, at the beginning of the program. Some of you might give a little quiz about your syllabus at the beginning of the quarter....think of this in a similar but more comprehensive practice. The idea of EWOB totally annoyed me at first; I was SO ready to dive into coursework. I didn't need a lesson on how to join a discussion forum. But after completing it, I saw its value. EWOB oriented students to all the technologies that WGU employs to deliver instruction, including its proprietary portal and two third party sites: TeachScape and TaskStream. It also reviewed Adobe Live

technology and other aspects of engaging online, like time management, etiquette, and more. I finished the course in a few hours, no sweat. But I'd learned where and how to use the resources necessary for my success. TeachScape offered videos, lectures, and readings on hundreds of topics, specifically a [series](#) on English Language Learners. TaskStream is a site through which students submit work and received rubric-based feedback. While WGU is competency based and you simply pass or don't pass a course, each assignment submitted to [TaskStream](#) does receive a grade on a 4.0 scale.

EWOB was crucial for all students to become familiar with not only required technologies but also resources available for help. EWOB introduced you to your program "Mentor," the professor with whom I spoke on the phone weekly or biweekly, depending on my needs. Dr. Tinney and I became friends and colleagues and even met at the international convention for ESL professionals (TESOL International). EWOB forced us to engage in dialogue and discussion before delving into coursework...the start of community building, a key to online success.

Even though WGU is competency based, its excellent use of user-friendly tech and components of regular, human contact made it so much more than studying to pass exams, as some people may think of such programs.

## **Week 5: February 16, 2015**

### **[Fear Inhibits Learning](#)**

[Pardon the interruption; I unexpectedly didn't have internet or cell service this weekend!]

Over the holiday, my husband and I excitedly accepted an invitation to meet friends and their kids in the mountain to go hiking in a national forest and also skiing. I don't have a long history with skiing. The first time I ever went was breathtakingly beautiful; I was an exchange student in Spain in high school, and the local school arranged a (really inexpensive!!) trip to [Andorra](#), a small nation in the Pyrenees. I remember having to buy

a ski coat which ended up being more expensive than the trip! (Aaaaah, the peseta. And a strong dollar. How we miss you. But the coat? I still have it!)

Anyway, our 20-odd-hour bus trip to Andorra was the first time I'd been skiing and the second time I'd been to mountains close to that large. I grew up in Mississippi and was definitely more familiar with muggy beaches, lakes, rivers, mosquitoes and the like. But after one beginner lesson, I found that I was actually a pretty good skier! I can't remember how many days we were there—maybe three—and after a half day on the greens, I progressed to blues, then the reds (blacks here) and by the time we started our last day, I was skiing black slopes (double black here). I wasn't just skiing these slopes; I was dominating them. I FLEW down those mountains, fearless, unaffected by the trees guarding the edges like stately soldiers. Sure, I was covered in bruises as blue and black as those designations and I didn't care; I'd gotten up to keep trying again and again and again.

But this weekend, those trees loomed at me and I thought maybe they were not so stately; maybe I would crash into one and be gone in an instant, just like [Sonny Bono and Michael Kennedy](#), who had tragically died within a month of our trip to Andorra. Let me note that even since my first time in Andorra, I have not been an avid skier. The next I went, if memory serves, was to Breckenridge, Colorado in 2008—ten years after the Pyrenees. Even there, skiing with my husband and friends, I was fearless, egging my husband on, zooming past him on the mountain and waiting for him to ride back up again. In Tahoe, two years ago and five years after Colorado, I was unafraid and saw each slope like a roller coaster—a thrilling, unstoppable, adrenaline-inducing rush of joy after each lift and each flight down a run.

So what happened this weekend? That, I still can't figure out. But I was spooked like a horse after a long gunshot. The friends we went with took their two kids, a 4-year old and 6-year old. The 6-year old flew down the mountain and the 4-year literally danced down it, singing to herself. But me? No, no. I felt fine on the greens, but with the warm weather icing over the hills, my first blue tripped me up. I lost a pole and slid down one slope for at least 50 feet. I wasn't injured, but one hand had ice burn. I overcame the shock of the fall over lunch and went to another blue over the hill with the family where

the snow was much lighter and kid-friendly. Or Katie-friendly. We ended the day on that blue run, flying down four or five times.

We returned the next day and the family wanted to start on that hill. My husband went ahead of me a little ways and I caught up; he'd seen I was a little slow and waited for me. He went ahead and then I fell. I slid down about 15 to 20 feet right before the steepest part of the run, picked myself up, climbed back up to gather my skis, and promptly waited there, trying to get my skis engaged and just looking at that steep hill for at least twenty minutes. I just needed a little pep talk. The family came rushing back by yelling, "Hi Katie!!" Steve was waiting for me at the bottom, and I felt a little helpless. A little spooked.

What does this have to do with teaching and learning? Well, I made it down eventually, and sat one run out at the top of the lift. At that moment, however, I felt a little like a gigantic hypocrite.

In my ESL classrooms and in the TLC, I try my best to create an environment in which the students aren't afraid, which is especially important in Second Language Acquisition. According to Stephen Krashen, professor of Linguistics and Education, maintaining a low affective filter is key to learning. A student's affective filter is tied to motivation, self-confidence and anxiety. Krashen claims that learners with high motivation, self-confidence, a good self-image, and a low level of anxiety can more easily succeed in learning a language. Low motivation, low self-esteem, and anxiety can combine to 'raise' the affective filter to form a 'mental block' inhibiting comprehensible input from being used for acquisition. In other words, a "raised" filter impedes acquiring a language.



**Week 6: February 22, 2015**

### Working with DRC Students

Wednesday before last, Russell Wong generously agreed to lead a workshop, coordinated by me and Eric Reed, about working with DRC students. For those of you who may not know Russell, he used to teach the Adaptive Learning courses and is a Learning Specialist at the DRC–Disability Resource Center–on campus. Last quarter, Russell started spending four hours per week in each the Teaching and Learning Center and the PSME Center. He has contributed greatly to helping the TLC Faculty better understand how to work with students with disabilities in tutoring sessions. However, the faculty still had questions about strategies to support students with other issues in and out of class. So, the three of us decided to hold a workshop.

The day came for the workshop, and Russell had prepared a comprehensive review of various learning disabilities for the audience. Several of us faculty had reviewed it with him and agreed we thought his information was well-thought out and appropriate. The workshop had good attendance, especially considering that it was not scheduled very far in advance, and the audience had a lot of questions. So many, in fact, that it became clear that we had too much to cover in a single session. I don't believe this was poor planning; I believe it shows a need on campus to have a better understanding of what the DRC offers, how students can access the services there, and how we can better help this population. Within that, specific strategies to teach them are vital, but we barely got a chance to review the very practical case studies that Russell had to prepare. A shame? Yes. But it also presents an opportunity.

**Week 7: February 22, 2015**

### Let's Be Honest

There just aren't enough hours in the day to do everything. If I could, I would write daily, reflecting. That isn't possible. Time aside, no single day in my job is the same, literally, and choosing a focus is sometimes difficult for a blog. Each day brings an interesting, notable encounter with a student...about their struggles, their critiques, and maybe something as trivial as what they ate for lunch. Or didn't eat.

Each day also brings a conversation about how we can do something better. A lot of these conversations are in progress and progressing on campus right now, one of which involves assessment. All in all, I'm happy to have endured part of the intake/gateway experiences that so many of our students do before they even meet us. And I wish them the best of luck on the listening section!

With Summer Bridge English well on its way to be offered in 2015, last week, the English instructors involved in it took the English placement test. The TLC was slammed that day, but today, I was able to go with a colleague to take the ESL placement test. Ah, the college board, how I do not miss thee. For a little background, I started working as a test prep tutor around 2002. At first, if memory serves I helped students with the PSAT and with the AP Spanish exam, on which I'd made a perfect score. Eventually, I got a "real" job, disliked its inflexibility while I was dating my army guy, and missed teaching, so I quit to become a full-time tutor. I helped with a lot of essays for school, but a bulk of what I was doing was helping the students prepare for the SAT and ACT. At this point I was living in Washington DC, which has a very healthy amount of very expensive private schools, and private tutoring was a very common practice, especially for tests which could help the students get into elite institutions. Of course, for these standardized tests, there is really no recourse other than to study for that test. So, I taught to the test. We followed the study books and then I would have the students take practice tests, study which kinds of questions the students were missing, and then focus on those types of questions until they could master them. Outside of test practice, I

made action plans for the tutees: study and use 20 new words per week. Write using them. Incorporate them into conversation. Memorize them. You know the drill. I'm not sure what to call this kind of assessment, but I have never believed it accurately represents, in all cases, a student's ability to, say, understand a reading passage.

Well, today, a colleague and I took the ESL placement test. From The perspective of having worked with standardized test for very long time, nothing is really surprising about it... Until we saw the results. The ESL placement test consists of four parts. First a listening test. I was careful to listen each question twice and check my answers. Part two consisted of questions related to language skills, and part three, if memory serves, was for reading. If a student scores high enough on the first three sections, he or she is automatically taken to part four, which is writing. I took the most care with the listening part, mainly because I wasn't so sure what it was seeking. You read the context of a situation, then listen to it, and then you are read a question. It's like a mixed media test question; I found it odd but felt confident with my answers. I won't tell you my score, but all sections were perfect except for listening. And my colleague had roughly the same results. Kind of strange! What are the ramifications of this? I'm not sure. But what was interesting was that afterwards, we reviewed our results with the testing center staff—a kind, accommodating lot—and found out that ultimately, there's a cut-off score based on the writing part. If you score high enough on the writing, it trumps the other sections. Hmmm! So why not take that part first and save higher level students time? Students cannot retest for a year, so little good would come from them following my old test prep strategies.

All in all, enduring part of the gateway/intake process that our students experience before we even meet them was insightful. And I wish them all the best of luck on that listening section!

**Week 1:** January 6, 2015

**New Year, New Quarter, New Students, New Concerns**

<https://www.youtube.com/watch?v=PKfD8d3XJok>

You know that moment when you walk into a room—a classroom, a conference room, a dinner party—and you feel the energy of the people, get a sense of their attitudes, their feelings toward you, their expectations for the activity to come. And for those of us sensitive types, we feed off of that energy, or wither in its presence.

This is how each new quarter begins for instructors and students alike. As teachers, we stand in front of the classroom scanning eager (or not so eager eyes) for signs of enthusiasm, interest, open-mindedness, and energy, or alternately, signs of active disinterest, suspicion, and reluctance. A familiar face in a crowd, a returning student, contributes to a state of relaxation—someone who took our class before is back for seconds! We may even anticipate a burgeoning academic friendship with a like-minded individual. More importantly, we assess the group as a whole. A high proportion of smiles, questions, laughs and nods contribute to the ease one feels that the class is off to a good start. On the other hand, a tried and true joke that falls flat, or a powerful question that receives no answer can lead to uncertainty.

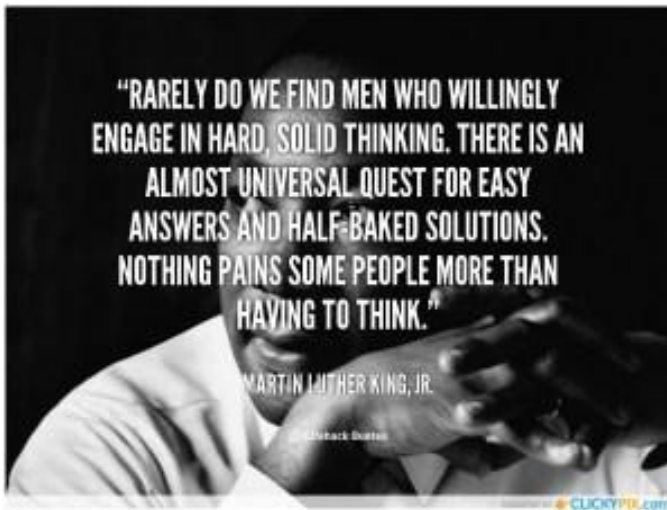
This uncertainty is not always a bad thing; in fact, it can force us to review our material instead of relying on our familiar strategies—isn't this the definition of progressive teaching? And while it is not always comfortable to stand in this position, here is where we have chosen to stand.

This next seven weeks will serve as an exploration of uncertainty, as well as a reflection on how to best mediate the ups and downs of a new classroom.

**Week 2: January 18, 2015**

## Revelation & Inspiration

Teaching is 10% inspiration and 90% perspiration . . . or so the cliché goes. But I have to say, without inspiration, the work can be stagnant, the sweat doesn't produce the effect you want or desire. Now, I have been teaching long enough to be able to develop,



plan, strategize, and adjust effectively, even on the fly, but the difference between good teaching and powerful teaching comes back to the 10%. This is challenging when you've taught a course a number of times and the spark of inspiration has been forgotten, or (as is the case with current events), become obsolete. It is then important to summon the ghost, or find a new spark to reignite the course. Luckily,

this can come from a news headline, a conversation with a colleague or student, a song, a poem, etc. For me it just happened to come from an upcoming holiday weekend celebrating MLK Jr.

The class had just completed their first in-class writing on the question: Can the "selfie" change the world? And I knew that many had chosen to answer in the negative, showing that pictures were just mundane and fleeting representations of the moment. We were also transitioning into a discussion of media framing, the idea that facts can only speak the truth so long as they exist in a frame that is acknowledged as legitimate a priori. Well, I was having difficulty convincing myself, much less my students, to care about the fact that the media frames reality for us, and that we also demand certain information and perspectives from them; in other words, we are asking for a version of

reality we already believe in, and the continuous stream of evidence then provided reaffirms our viewpoints (a vicious circle as you can see). I find this concept fascinating, but realized that my students were already agreeing to this reality, had determined early on that the media was manipulative, that journalists and television skewed the truth. However, in agreeing to this reality so wholeheartedly from youth, they no longer cared. They had grown apathetic and complicit in this crime as a result. The question then arose: How do I get my students to care about the misrepresentations that occur in the media?

I spent four hours that night staring at the computer screen trying to revise my lesson plan, to imbue it with a sense of urgency prior to the holiday weekend, so students would be inspired to work hard. It was then that I realized with an inward shock that I was referring to the memory of MLK Jr. as merely a holiday! This was all the inspiration I needed to look at the reading with fresh eyes, to note themes and phrases that had lain asleep and unmoving merely seconds ago, and now they leaped off the page and shown brilliantly the power of words to quell our rebellion or to move us to action.

For the students, this inspiration was unseen, their only evidence of it a reminder of the holiday at the start of the class in which I asked how they planned to spend the holiday. The resounding reply was “to sleep,” to which I replied, “I’m sure that was what MLK intended with his fight for civil rights—to give you an extra day to sleep in” (quite pithy I thought). This received a laugh, but it was a laugh of self-awareness, even a hint of guilt. And with this I launched the mini-lecture to show the reason we are still fighting discrimination despite many of our feelings that equality is the status quo. I used a recent TED talk by Chimanda Adichie titled, “The Danger of a Single Story,” to illustrate the parallels in the arguments made by MLK and contemporary writers, and skirted the statements of “I have never experienced or seen discrimination or prejudice” when I asked students to complete a freewrite: Discuss a time you were a victim of the single story, or guilty of following that story. What ensued was a much more revelatory class debate that I hope will continue as a result of taking inspiration from the immediate moment.

On a related note, I had another stroke of inspiration today. I was listening to NPR and heard an excellent discussion about confirmation bias and the role of expectations in success (a topic I have taught in the past, and one I'm again working on in a few different courses this year). It just happened to be the perfect source to connect them all in a nice neat bow. I encourage everyone to listen to the show to explore how our own expectations may be affecting ourselves and our students:

<http://www.thisamericanlife.org/radio-archives/episode/544/batman>

**Week 3: January 31, 2015**

### Sustainable Teaching

A wise colleague once told me, "If you think that staying up all night to grade essays is going to happen just once, you're wrong. You will always have essays to grade, and if you start doing this now, you'll continue doing this for your entire career. You'll burn yourself out." Now, there have often been times when I've resigned myself to an all-nighter: my report on France in the 6th grade when I forgot to tell my mother the actual due date (she stayed up with me that time); the four literary analysis papers in senior year (these required weeks of work, but always ended with early hour completion on the morning it was due); the numerous final essays in college and grad school (my overly-ambitious ideas always needed additional pages, smaller font, and more hours than had been given to complete) and, let's be honest, the prep-work for interviews (these bore out the wisdom that you did not stop until the time was actually up and the interview was upon you).

Even as a part-time instructor, there was a feeling that you did what was necessary to make a living, taking on four or more classes, and often the same number of preps, and inevitably losing sleep to finish grading or preparing, all while completing your own courses for the certificate that would take you to the next level. This was not sustainable, but had a pay-off that was motivating. And I am fortunate that it did pay off. But the first

years of tenure have brought up new “necessities” for burning the midnight oil: the first observation, the second and third and fourth observations. And the grading. Always the grading.

Do not get me wrong, I chose this profession because I want to see what my students create, how they argue, and what insights they will offer. I find this in discussion, but even more so in their writing, which can often amaze me! But, I haven’t yet found a way to make this the process of grading sustainable.

I could easily point to my two young daughters as evidence of yet another short-term challenge that will become easier in a few years, and one of the reasons for the lack of time and lack of sleep. Any parent knows that even the best newborn needs a little love in the wee hours of the morning. Even more so, they are further reasons to pull a few late-night sessions to get the grading done while the house is quiet and demands for attention are low. The problem arises when the work hours bleed into the nurturing hours, and then into the waking hours. And let’s face it, these lovely challenges are not short-term, and unless the hype about the teen years is completely mythical, I’m facing a few years when the nights as well as the days will be filled with demands. And even this statement belies the fact that other demands are present, those not being met, namely the physical demand for sleep. It can be fought off a few times, but after more than one late night, the body becomes a traitor, eyes blurring and losing focus, head jerking in another failed attempt to shut down. The short and long-term effects of sleep deprivation are frequently highlighted, but I digress . . .

Reflecting on my colleague’s sage advice, I realized that I was not *creating* an unsustainable habit, but was merely *continuing* a pattern of behavior that had started over twenty years ago when I first sat up in my room after all the lights in the house were out, and listened to my thoughts echoing in the vast space of serene alone-ness. The irony is, we warn our students of this very behavior, caution them against writing their papers the night before, or of trying to do too much and being tired and inattentive in classes as a result, but we engage in these behaviors since they feel temporary (and strangely soothing), Conditions having changed in the years since I was a student, I am



now forced to admit that I can no longer bounce-back from a night or two up. In other words, this is no longer sustainable.

So, I began, as any good psychologist would, to question my behavior: What does this pattern of behavior fulfill? And is this a pattern I can change or replace with a more sustainable practice? And what resources are sustainable?

First, I decided that I'm seeking a time to grade when demand for attention is low. Yes, my own children are part of this, but I also have a sense of responsibility toward my students, and devote those hours on campus to conferences and tutoring. There is a conflict then between the time I give myself to grade, and the time that I actually take to do it. This becomes a question of available resources. How much time do I actually need? And how much time do I actually have? And where can I find that time?

Second, I am the type of person who likes to grade in large batches to get a holistic vision of the student work. I do this to get into a rhythm as well. The large batches are completely unsustainable unless I extend my work into the wee hours. So my typical process of doing it all at once no longer fits. While the time may be available overall, it doesn't come neatly in 4 or 5 hour chunks, but rather 30 minutes to 2 hours. This requires a different allotment of my resources.

Third, I have chosen to use Turnitin.com because there are no papers to get colored on, torn, dirtied, or lost within a busy and sometimes messy household. It also gives students and myself access at any time to the materials as well as a clear and concise rubric for giving feedback. There are also many ways to respond—embedded comments, the rubric, voice thread, summary comments, grademark, etc. Unfortunately the options have become a demand to cover them all. I want to give students as much feedback as I can, which means I sometimes give too much, until I have used up my allotted time resources on only a few students. Of course this means a late night (and I can do this in the dark on the computer!!). Because I need to use my computer to grade, there are other resources needed. I am more reliant on space, internet access, etc. Perhaps purchasing a smaller portable device (yes I am still without an iPad), would facilitate the

simple method: grade one or two essays while sitting at the doctor's office. The resources are there, but I'm not quite availing myself of them in the best way.

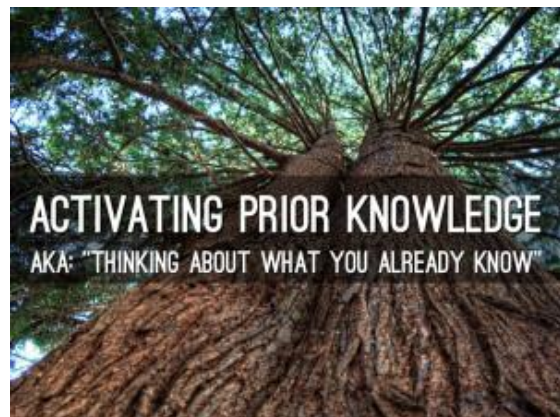
Finally, I am addicted to the cycle of work and rest. It feels immensely satisfying to complete a set of essays—project well done self! This is in keeping with the feeling that we sacrifice in order to reward ourselves (I feel a hint of Puritanical values here, though without the much loftier and long-term reward). But this means that I've depleted my precious resources of sleep and energy, and must build up the high levels before launching into another "project." Perhaps it would be better to set smaller goals and more immediate rewards—to sleep at 11pm?!?!!

I know this blog might inspire some well-meaning advice from those out there who have figured it all out—20 minute timers, 5 essays at a time—and I welcome them, with an understanding: until the cycle can be broken, I will continue to justify my time spent in the darkest and quietest hours as "productive time."

**Week 4: February 17, 2015**

### [Psycho-Schemata](#)

The other day I asked a student why he hadn't done as well as he expected on the recent essay, and he hesitated before saying, "You may not want to know this . . ." I braced myself for a criticism of the course, the prompt, any class related issue, but what came instead was a personal story. The details of the story are not necessary to divulge here, but as many of us know, the office hour confidential is often unexpected and surprising.



The first take-home essay I assign asks students to look for misrepresentations of their identity in the media. And through this activity I learn a great deal. I now know that I have at least five “introverts,” vast continents covered in origins, just as many languages spoken, a number of serious health concerns, two veterans, some gamers, a handful of feminists, two DRC students, and yet, while I group them easily into these related categories, I see just how easy it is to overlook the subtle needs of each student.

We frequently “activate schema” and prior knowledge of students, preparing them for the topics to come. And we use assessments and placement tests, diagnostics and SLOs to help us predict the type of students who will be entering our classes, but they tell us so very little. We know their test scores, prior grades, their ability to craft a thesis, paragraph, essay. But do these pieces of information truly prepare us in our encounters with our students? We still need a deeper understanding of student mindsets, cultural expectations, and psychological and emotional barriers to best meet student needs.

One recent revelation came during a meeting about that aforementioned assignment. A student from Malaysia (one of five in my classes this quarter) chose to write about the history of colonial oppression and its effects on student behavior, namely submissiveness and silence. Her goal was to show how a perceived lack of participation was actually an unfamiliarity with and fear of offering opinions and speaking in class. She hadn't yet determined the audience for her argument, but was thinking of telling other Malay students how they needed to understand the expectations of American teachers—to speak out, to ask questions, to volunteer ideas—and “step up” to fit in. I immediately felt a twinge of discomfort; participation is part of students' grades, and central to the mechanics of the classroom. While I don't plan to shift away from a participation-based model, I have to re-consider the ratio of independent, silent work, to discussion, debate or small group work.

With such a diverse and ever-shifting student body come other interesting challenges, such as engaging with students who are more worldly than myself. I have far-flung dreams of travel and am relatively well-read, but that doesn't give me authority given that my students have first-hand experience of some of the most volatile regions and current conflicts, or have lived and traveled around the world, speaking 2 or more

languages as the norm. When teaching works that deal with themes of acculturation, trauma, genocide, human rights, etc., I can assume that some students will be completely unaware of the issues, and the questions I ask, the activities I create, must take those students into consideration in order to aide them in stepping into an unknown world with sensitivity. I might play the role of the student, asking the questions they are too afraid to pose, or “sharing” initial thoughts on the text in a previewing activity that would again allow the students with the least awareness to find their way. But the problem comes when the false naivete I am assuming dismays the students with a greater cultural cache. Then I am caught between those two worlds. It becomes more important in this scenario to let the students ask and answer questions themselves, find places of uncertainty within the text and then resolve those issues by looking for answers from the author, textual clues, and from their peers or myself. I like the questioning circles for this. Each intersecting circle represents one type of question: text, personal, or world. Guiding students to connect these three realms allows them to tap into their existing schema (revealing this to us in the process). This is also a great opportunity for small research assignments or outside activities that would give greater access to the information that they were missing.

These adaptations are always part of the profession, and every quarter, every class means a new group of students to assess, and the students who surprise us remind us to not just rely on our prior knowledge of the student body, but to constantly reassess and rebuild our schema for who our students are and what they need. This means that our curriculum must also adapt, and that we should build in activities that allow students to share this worldview with us, lest we find ourselves teaching a class to students we’ve only imagined.

**Week 5: February 19, 2015**

### [My Daughter Can Read!! Now, How to Keep It that Way](#)

Yesterday, my four year-old daughter and I were cooking breakfast. She was whisking the eggs while I poured in the milk, and I was quizzing her on the spelling of the items we were using.

“What is the first letter in ‘milk’? M-m-m-milk,” I prompted.

“M-m-m. M . . . Tell me about a time you got in trouble.” She took a break from whisking to eat some shredded cheese on the cutting board.

Stalling, I said, “First, what is the next letter in ‘milk’?” I raised an eyebrow purposely as she swiped another handful of cheese. “Hey there, little muncher! No more. M-i-i-i-I-k. Ih-ih-ih.” I encouraged her.

“ih-ih-ih. I. Tell me the time you got in trouble with the plant.” She was unrelenting.

“Okay, but finish spelling ‘milk’ first.” We pushed through “L” and “K” and I once again described the time when, at the age of one, I had mischievously grabbed a handful of dirt from a potted plant, and smiling at Grammy, proceeded to dump it onto the floor.

“What did Grammy say?” “How did you get in trouble?” Each question was punctuated by another nibble of cheese.

“She gave me a time out. Now, let’s spell ‘pan’” I pushed the cheese out of reach. This word she breezed through.

“Puh-puh. P . . . A . . . N. My belly hurts. I’m soooooo hungry. I need an appetizer.”

“Wait, Tiny. Do you realize that you’re becoming a speller?!” I squeezed her and swung her in between my legs a few times before she wriggled away.

After breakfast, I wrote single-syllable words on a piece of paper in bold, capital letters: CAT. LID. DOG. PIG. HAT. My daughter sounded out each letter, “kuh, ah, tuh.” and for

the first time without hesitation, promptly put them together. “Cat.” Then “Lid.” Then “Dog.” And so on. It was like a page from reading theory textbooks on language acquisition, a scene described in Jean Chall’s *Stages of Reading*. It was surreal and amazing. I was giddy and full of hugs. Some of which she accepted before pushing me away to “try to spell on my own.” And she did. “Octopus” was sounded out five times, and each time a new letter appeared on the page. The “O” came first, followed by T, P and S. They arrived like the scrambled words in a website verification script, some higher, some lower, the “S” backward” and the “P” up front after she ran out of space on the right. But it had all the potential of a word.

I was so thrilled with this new development that I pushed her to try another word. When “Banana” quickly deteriorated into a picture of a pond for the humming fish, I tried to bring her back to task, but had little success. In fact, the more I pushed, the more she resisted. This was the scene I was familiar with. Months earlier, her teachers had told us that she wasn’t holding her crayons correctly for her age group, and I practiced this with her at home. She was capable of doing it, but often said, “This is just how I do it. Everybody has unique ways. This is my way.” How do you argue against individuality and creativity? Instead, I would watch for those opportunities when she seemed most relaxed and open to suggestion, hinting that she should pinch the crayon or pen differently, or immediately running to get paper and pen when she was inspired to write, watching for attempts to sound out letters and then pouncing—“Great! Now the next one”—and being careful to back off as soon as I sensed frustration or resistance. The worst outcome, as all teachers and parents know, would be for her budding interest in language (or numbers, science, art, etc.) to wither before truly developing, and to have an inner sense of resentment follow her throughout school.

While meeting with students in the TLC or in office hours, some students look to you for instruction, eager to absorb the critique and make changes, looking for answers. Others seem to be there under duress. You can almost imagine the invisible cuffs holding them in the chair. At times their resistance to reading, to writing, and especially to revision is palpable. It pervades the room with its negativity, and threatens any positive growth for the student. Recently, I met with a student to whom I had suggested an essay revision.

At each note or suggestion, she offered a rejection, stating that she “already did that,” and giving me a look that suggested I was inept for not seeing it. I then tackled the more dominant grammar issues, mentioning a few patterns I had marked in her essay. She gave an exasperated sigh, and I asked, “Are these issues familiar?” Her body reacted first. The eyes rolled, the shoulders dropped, and the slump deepened further in the chair. The “yes” was merely a formality. I asked what she had been doing to work on these issues, and she gave the answer of what she “should be doing.” There were many “buts” “can’ts” and negations. A push at this point would not lead anywhere, so I left it in her court. I gave her options and resources. I’m hoping that next time I will catch her more willing, more ready on her own.

By the way, my daughter just read the word “family.” I would like to take some credit for letting her find her way here . . . with some help.

**Week 6: March 1, 2015**

### [Vygotsky Walked into a Bar . . .](#)

. . . and began to criticize the bartender, an old and experienced drinker, for serving alcohol to minors. He said, “That’s just going to get them drunk and discouraged. If you want to really teach them how to drink, let their older siblings show them how it’s done.”

Lev Vygotsky then wandered into the Basic Skills meeting advocating for campus enrichment activities, held sway in the Ad Hoc Assessment Committee arguing against “over or under-placing,” spent hours working on Summer Bridge and FYE to create a student-centered and interactive model for learning, hung out in my classroom cheerleading the group activities—“You teach him!” And then he spent the rest of the day at the TLC giving tender loving care to tutors and tutees. I think he attended the revision workshop I set up for Friday. **And these are only the places where Vygotsky was mentioned by name in the last two weeks!** Just imagine all the places where his theories are being put into practice.

Now, if you aren't familiar with the name, Lev Vygotsky advocated for a social development theory of learning, and coined the term, "the zone of proximal development," where, he argued, the greatest learning takes place as a lower level learner negotiates meaning with the guidance of a "more knowledge other"—a teacher, more advanced peer, a tutor, or a group of individuals with a diverse set of complementary skills. It is the foundation for a student-centered classroom, one in which the teacher facilitates student discussion and meaning-making, and it is a principle that has underscored my own pedagogy.

This Friday, I introduced a new text to my classes, a graphic novel titled, *Deogratias: A Tale of Rwanda*." The concepts are challenging, focusing as they do on the Rwandan genocide and the way our sympathies for an individual or group of people, even a nation can encourage our intervention (or without sympathy can prompt repulsion and lack of intervention marked by apathy and aggressive neutrality). However, I have tried to scaffold the work carefully, building schema for the conflict and the ethnic groups involved with prior texts and assignments, and providing a lecture and materials on how to "read" graphic novels. But there is no way I would be able to walk through each panel with them, nor would I want to do this. As an instructor, I want them to make meaning on their own, read and analyze, and come up with their own view of the text. So, when they work in groups, the more adept students, those capable of analyzing and interpreting images and texts, can lead the way for the others.

After a brief lecture on the language, shape and function of graphic novels, and a modeling activity in which I illustrated how I studied and annotated the panels, drawing connections to the previous work on the topic, I asked the students to get into small groups and review two pages of the text, noticing details in an attempt to draw inferences about the characters and the world of the text. I had very few expectations about what students would notice, and was pleasantly surprised at the way their conversations evolved. In one group, a student mentioned the lack of borders around certain panels, and asked if that meant it was a flashback. The other group members noted additional details—clothing, the eyes of the character, coloring of the images, and the shift in setting—to affirm that hypothesis. In another group, a member make a



comment about the plot, that the main protagonist seemed to be stealing from the church, and thus declared him as an opportunist, a criminal, and immoral. Yet another member of the group pointed out a small machete resting on a wall outside the church as a symbol of the future conflict and the violence associated with the religious officials. A third group member carried this argument still further, reminding his group and our entire class of the role of the church in the previous novel we had read, giving the specific example of the deaths that had taken place in churches due to corrupt priests, even giving a close paraphrasing of the original text. This is the type of illumination Vygotsky's theory allows for, the layering of ideas that help develop in depth arguments.

Now, this assumes that the "more knowledgeable other" is informing the negotiation of meaning; otherwise, you have a somewhat different story. This was the case with another group in a separate class. In this class, there is a tentativeness among the students, a difficulty speaking up due to language barriers (60% are international students) and cultural norms (30% have mentioned that they were discouraged from sharing their views, even having their own opinion in school). And while these quiet students are often quite insightful and articulate, the dominant speakers are the ones that are setting the bar or driving the analysis. They are not the "more knowledgeable other," only the "more outspoken other." Given the same task as the earlier example, one of the peer groups began to notice that there were cockroaches in one panel of the novel. Our earlier reading had explained that this was a derogatory term for an ethnic group in Rwanda and Burundi, and many students had used quotes that included this terminology, so it would have been prior knowledge for them. But instead of making the connection, the student mentioned that this must mean the place is dirty since it is a third world country. This statement is full of cultural assumptions that distract from the actual analysis of the work. A second student chimed in and added that the protagonists' clothes were also ragged and dirty, and he drank the beer quickly, so he must be economically disadvantaged and thirsty. There were agreements in the group and personal examples given about how refreshing it would be to have something cool and clean to drink in a place without running water. While these are not necessarily incorrect, they focus too much on a literal and culturally biased interpretation. I had to step in as the instructor and replace the line of reasoning with another one, but since

the students had arrived at that inference on their own, this made the information more established in their minds (they made the meaning, rather than received it), which meant it was more difficult to introduce a new argument. But even this example illustrates Vygotsky's theory that meaning making is powerful and determined by the social interaction.

While not all the interactions are perfect, there seems to be a trend of creating "zones of proximal development at Foothill lately. I believe someone must have invited Vygotsky to visit. In fact, I think he may be camping out in the bamboo forest, and I hope he stays for a while longer.

**Week 1: January 1, 2015**

## Pressure

# Pressure

Confession time: I am feeling a lot of pressure here that I didn't anticipate. When I set out to help bring the reflective writing project to Foothill, I thought it was a no-brainer that I would participate. I read and think and talk about teaching and learning ALL the time, for heaven's sake, probably to the point that friends and loved ones wish I would ease up (i.e. shut my trap!). Even though I've never blogged before, with all the continuous pontification and spouting off, I thought, how hard could it possibly be to come up with a 25-sentence blog post for a few weeks?

Now that the pen has to actually hit the paper, though, I'm realizing I left out a few essential qualifiers in my premise. What I really should have asked was, "How hard could it possibly be to come up with a few 25-sentence blog posts that are articulate, entertaining, profound, insightful, clever, deeply meaningful, etc. etc. in a manner consistent with my tenure as a "veteran" teacher and faculty leader?" What if I fail and embarrass myself? I'm afraid this project might leave a mark.

Both my desk and computer desktop are littered with real and virtual sticky notes with potential blog topics (in no particular order):

- What I did in class this week that influenced learning
- What I did outside class this week that influenced learning
- Obama's plan to make community college free for everyone
- Education and equity (especially access to general education, and equity)
- Learning is uncomfortable
- How I am working on humanizing my online courses

- Why I crave learning constantly and dismay that others don't always seem to and does this mean something is wrong with me and what should I do about it
- How can I help students value learning
- Measuring learning: what is possible, what is helpful, what is not possible, what doesn't matter
- The interdisciplinary nature of everything
- Climate change, and how none of this other stuff matters anyway

And last but not least:

- The 962 really important things I read, heard and saw today that I need to implement in my teaching RIGHT NOW.

I think the last bullet point sheds the most light on some of the origins of the pressure. For whatever reason, I have grown into an adult whose thoughts very usually include the words “should” and “must” and “have to.” (My beloved says it's just because I was raised as a good Lutheran girl. RUDE!) So, for me the idea of continuous self-reflection and improvement is not just an effective, desirable practice, it's an imperative, “I am supposed to be a leader and I have to fix all these things right now or I cannot face myself because I am failing myself and society and my colleagues and my students!” I feel compelled to address the interdisciplinary nature of education and somehow “fix” it at my college, so my students are better equipped for life challenges. I feel compelled to do a better job with humanizing my online courses and I read three articles this week about pedagogical approaches that can help, so I really should be trying them IMMEDIATELY or it's most likely my fault if a student drops. And good grief, Obama announced his plan for free community college over a week ago and I still haven't done all the background homework reading I need to do to have a really informed opinion, let alone do my civic duty by letting my state representatives know how I feel. It's a really interesting idea with a lot of potential promise to help students – particularly those who are most often disadvantaged – and if I don't do my part it might not happen or it might happen in the wrong way!

And I haven't even begun to address all the other topics, yet – ACK!

So maybe I will hang in and try to think about this blogging project as a sort of systematic way to better organize my efforts at self-reflection, and at prioritizing my attention and actions. With that in mind, I'm going to try (try!) to ease up a bit and let go of trying to write a few 25-sentence blog posts that are articulate, entertaining, profound, insightful, clever, deeply meaningful, etc. etc. in a manner consistent with my tenure as a “veteran” teacher and faculty leader. Maybe I will be OK with picking one idea at a time and muddling through without worrying about being clever and poignant, but instead just have the goal of learning more about teaching and learning, and helping students be successful, and forgiving myself for not being able to try to make everything better and shiny and perfect all at once.

**Week 2: January 25, 2015**

### [Incorporating Equity Discussions in my Online Human Nutrition Classroom](#)

This week I was a bit stunned when I read headlines about the new research from Oxfam, for example, the one from the New York Times, “[Oxfam Study Finds Richest 1% is Likely to Control Half of Global Wealth by 2016](#).” (Before I keep typing, I have to pause again and try to even wrap my brain around that. 2016?! No way. One percent? Dangit, can't get there. It's going to take lots more rumination.) Although I have been thinking more about equity (inequity, really) with each passing year, with rising public awareness of equity issues I think this an especially appropriate time for me to sit down and think strategically about if and how I'm incorporating equity ideas in my teaching.

For the sake of convenience and common sense, I'll start with my Bio 45 “Intro to Human Nutrition” class that I'm currently teaching online. I've taught it many times, almost every quarter for the last 12 years. It's a required prerequisite for many students hoping to enter health career programs like dental hygiene, nursing, and medicine. As

such, the focus is on the links between human nutrition and disease, and the science of human nutrition – how we know what we know about human nutrition needs, and what scientific evidence we have that poor nutrition leads to chronic illness. Although some might argue it's not important to talk about equity in this particular class, I disagree. There are equity issues that touch every discipline, every career – especially health care. (If you've never watched, "[Unnatural Causes](#)," a PBS documentary about health equity, put it on your "must see" list. It explores how inequity takes a toll on individuals' health, and the consequences to our society.) Since I have a captive audience of future health care providers, it would seem a shame for me to pass up my opportunity to help them begin to think about these issues and how they might inform their practice later.

It is at this point that I deliberate how best to approach equity pedagogically, so I think about the outcomes I'm going for. I want the students to think about what equity means, and how equity is related to health and to nutrition. To consider why it's important to them as individuals, as future health care professionals, and to society. I want them to begin to form their own educated opinions and not blindly accept what they hear or see about these complex issues, but at the same time be open to incorporating new ideas and opinions. Are these realistic expectations?! Maybe I've lost my mind... but I have come to know that students often surprise us, and will rise to high expectations (or trip over low ones). And where else do I expect students to gain these skills if I'm not willing to take a chance on them in my classroom? It's not that they have to have mastered these outcomes at the end of my class, but I hope to at least start them on a journey.

So, how best to facilitate their achievement of these outcomes within the current construct of my online class? In a way that's consistent with both my published syllabus and the official course outline of record? (Assuming I don't want to overhaul the whole thing or add some major new component – which is a COMPLETELY safe assumption at this time, it being the middle of a quarter.) And, do I tell them straight out what (I think) the equity issues are and how they tie to food/nutrition? Or do I give them a broad, open prompt and let them explore for themselves?

My personal teaching style is to avoid telling as much as possible. I think requiring students to locate credible information actually helps them be more self-reliant lifelong

learners. However, I'm also mindful that this approach is more stressful and time consuming for many of my students so in this instance my challenge will be to try to increase their buy-in by making it interesting and engaging, and as low-stress if possible. I've set up my online class to include weekly postings in the discussion forums so it seems like this might be a good place to start – prompt them to poke around the internet to discover what equity issues there might be in nutrition and health, and create a space for them to exchange ideas. I hope that allowing them to choose their own issue might make the exercise more engaging than me dictating what they must think about. Ideally, I'd like them to consider multiple perspectives and even disagree with each other, so they might become a little more comfortable discussing controversial issues and practice doing so in a respectful manner.

I have the luxury of built-in flexibility in choosing discussion topics for weeks seven and eight on the fly each quarter, so I'm going to go for it. It feels good to be able to overcome some longstanding inertia without creating a huge new pile of work for myself. Fingers crossed, I will keep you posted!

### **Week 3: February 1, 2015**

#### [Cranky](#)

I must say, I've been feeling like a bit of a cranky-pants these last couple of days. There are a couple students in my online class who are becoming short and snippy in the discussion forums, and it's wearing on me. And no, they're not just being generally snippy – they're snippy because they don't like the class. Or at least the requirements of the class. Or the instructor. Rawr!

When I boil it down, I think the ultimate source of discontent here is my insistence on quality with their communications. For starters, I make them spell correctly. Oh, the horror! Call me crazy but in my experience, it's important. For a student who is careless

or just not used to worrying about spelling, I can certainly see how my requirement could be burdensome. Each week there is an online quiz (in Etudes) and many of the questions are fill-in-the-blank. If they spell the darned word wrong, it's marked as incorrect. If they want to fix the mistake (which I hope they do!) they can just go back in and re-take the quiz – they're untimed and set to allow limitless attempts. (Side note: I actually intend for them to take the quiz multiple times, as I've set them up to be formative rather than summative assessments. The whole purpose is defeated if they only take it once, but this is a topic for another week's blog.) But now I have two students who are quite vocal in their opinion that "this isn't an English class" and having to go back and re-take the whole quiz because they made a little typo is just a COMPLETE waste of their time. I can almost hear the harrumph at the end of their post.

It gets worse... spelling is just the very tip of the mean teacher iceberg. Each week there is a substantial writing assignment, and I insist that they use correct grammar. Proper subject-verb agreement, avoidance of apostrophe abuse, even using complete sentences, etc. (Yes, I realize that was an incomplete sentence.) My two incensed students have made it very clear how they feel about these outrageous demands in this human nutrition class, which has nothing at all to do with English. To be clear, they won't fail the assignment if their grammar stinks. As long as I can tell what they're trying to say, they're going to pass, they just won't get an "A." This policy and my grading criteria are carefully explained in my syllabus. For the first several weeks, I actually carefully correct spelling and grammar as I grade; I also send them the link to the TLC and encourage them to go. It does not take an insignificant amount of time to make all the corrections, and I invest the most effort here in the beginning of the quarter. I figure if it's week six and they're not reading my feedback and don't seem to be even trying to work on their writing then geez, I'm not going to care more about it than they do and I stop with the detailed corrections. However, I find that for many students this is not the case – if I invest the time to provide that feedback they will often step up their game in subsequent weeks. Maybe cheerfully, or maybe grudgingly – I can't tell.

I could go on here and write another paragraph about what an unfair teacher I am for requiring them to choose their words carefully, but I'll stop whining now. Big picture: no,



human nutrition class is not an English class. Their assignments are not being submitted for publication. Even so, written communication skills can make or break a job application, cover a healthcare provider's bootie if their documentation gets pulled into a courtroom, or have permanent effects on professional relationships, to list just a very few of MANY reasons! I do explain my philosophy in my syllabus and in the forums, and maybe this helps some students feel less abused. Although I'm just a cranky biology teacher, I feel like letting students slide by without providing frequent opportunities to practice and improve their writing, and then requiring nothing less than their best efforts in the process, would be doing them a tremendous disservice... so I'll just have to put my armor on again and log back in.

## **Week 4: February 9, 2015**

### **Compulsories**

Why is it that as soon as something becomes required, it's not fun anymore? Take for instance this blogging thing. As I mentioned in my week one post, a weekly reflection exercise originally sounded like a great idea and I was super excited to sign up. I love thinking and talking about teaching and learning!... as long as no one is MAKING me do it. But now it's Sunday night, there's a midnight deadline (I think?) and the blog post I've been looking forward to is now more of a chore than a treat. What happened?!

This gives me some empathy for my students. Although I'm teaching online and I'm not physically in a room with them, I can tell their stress levels rise when a deadline is approaching. The tone of their writing in the discussion forums and private messages changes, and more frustration or irritation creeps through even from students who are normally friendly and cheerful. These are the same students who have repeatedly expressed enthusiasm for the weekly nutrition self-analysis work and frequently comment about how valuable they think the assignments are, but when there's a looming deadline that joy is gone. I think this is important for me to remember as a

teacher – rather than taking their frustration as an affront to the class or my teaching, it's just an unavoidable human reaction to a forced task. I don't even know if it would help if they worked ahead of the deadline? (Hmmm.... Maybe I should try it sometime.)

Perhaps within a week's time, making a conscious choice about the days or times they work on an assignment could make it more pleasant – I'm not sure I buy this, though. My guess is that it might make it a little less onerous, but that it still wouldn't be FUN.

Are there any psychologists out there? All of our behavior has a biological basis that evolved for a reason. Why does fun stuff become un-fun once mandatory? Is this a dominance/control thing? Is rebellion and uprising against authority a biological imperative? (Wow, THAT was a leap!) I have digressed.

My immediate and painful awareness that compulsory tasks can become burdensome or even downright repulsive has also reminded me to have empathy for my colleagues. Let me spin that out: Pretty much all of my peers like to talk about teaching and learning, and genuinely want to find ways to be more effective. We geek out when talking about our goals for our students, and how we can assess their progress. We love to hang out over a cheese plate and glass of red and debate about what's working (or not working) in our classes. That is, as long as no one is forcing us to do it... or worse, DOCUMENT it. The joy of reflecting and collegial dialogue and exploring the potential value of our classes in the context of our students lives is decimated when someone brings up that ridiculously unintuitive TracDat program (that I actually get along with, personally, perhaps because I'm also ridiculously unintuitive).

Is there a solution? Can I require my students to complete a rigorous assignment and preserve the enjoyment they might find during this learning process (instead of just afterwards)? And, can faculty engage in the process of student learning outcomes assessment and reflection, without letting the mandate and documentation requirement kill it? Is the value of the documentation piece (which I'd argue is not nothing) substantial enough to keep? (Not that we have a choice at this time, but I'm a believer in the possibility of change.) My takeaway is again a reminder for kindness and compassion in daily interactions with students and colleagues. It is also a prompt to keep thinking about how we might preserve the enjoyment we find as professional

educators who are genuinely committed to our students' learning, at the same time that we meet an accountability mandate. Biological impossibility? I hope not!! In the meantime I shall continue to execute the wine and cheese de-onerousification experiments, and report back.

## **Week 5: February 17, 2015**

### [Be Less Helpful](#)

What?! Blasphemy! We are teachers, and at a public institution, no less... is it not our duty to be as helpful as possible? NO. I think being too helpful has contributed to our current predicament, in which we may occasionally find ourselves wondering if people (not just students) are helpless. Here are two separate events that recently transpired in my class and which led me to this post:

1) Student posting to class discussion forum:

“Hey can anyone tell me if bananas are complex carbs or simple carbs?”

I had to resist the urge. I was successful. I did NOT reply with the following:

<http://imgtfy.com/?q=bananas+carbohydrates>

2) Another student posting to class discussion forum. (Backstory: in her food diary, she wrote down that she ate “10 strawberries.” Later she had to enter her intake into an online nutrition analysis program, and there was no option to enter “10 strawberries.”)

Strawberry Student posting: “My options for fresh strawberries are things like teaspoons, tablespoons, cups, ounces things like that. I’m not sure how to enter them in with these units, especially since I already ate them (lol)”

I suggested there might be an easy way to figure it out. My prompting questions: “In this day and age, what’s the quickest way to get information about estimated amounts or

weights for a particular food? Or heck, what's the quickest way to get information about [fill in blank here]?"

Strawberry Student reply: "I'm completely missing the answer to your questions, Dr. Holcroft, I don't know?"

Helpful Classmate: "I think she means Google. ("How much does a strawberry weigh?")"

Strawberry Student: "OH! Lololololol."

Now, I can't be positive but I'd bet a large sum of money that if I'd asked, "Who is Cameron Diaz dating this week?" or "When is Lady Gaga's birthday?" she could have gotten back to me with an answer from her device in less than 20 seconds. I'm not complaining, and I'm not making fun. I'm just thinking there seems to be a pretty big disconnect, in that students will use Google (or internet) independently in some situations, but for others it doesn't even occur to them – and I wonder if teachers are contributing to the disconnect.

My hypothesis: college instructors are predisposed to be "tellers." I confess, when I first began my teaching career I was right there, myself – a student would ask a question, I would tell them the answer. When I've had occasion to do peer-evaluations for colleagues, I often see them do the same.

I think there are a couple of reasons for this, and the first is that it's just too easy to answer questions directly. It usually takes less effort to answer straight out than it is to try to lead someone through the process of arriving at his or her own answer (even if that process is as simple as Googling). I think the second reason may be that historically, the default when hiring new college faculty often seemed to be to place tremendous emphasis on content expertise and much less on teaching (although I think this is changing, to the benefit of students). This reinforces our identities as highly educated disciplinary experts, and jumping in with helpful answers is consistent with this perceived role.

In the long run, though, I think being too quick with a helpful answer does a disservice to students. It reinforces the expectation that (at least in an academic environment) there

is always someone there who will tell you the “right” answer, and with little effort on their part. Although convenient now, they may not yet realize this is not the way the world outside the classroom works. They get frustrated when I’m not forthcoming with an immediate answer, but I want to help them to reach a point where relying on their own ability to access credible information quickly is their default strategy. As such, I try to help them capitalize on each and every opportunity to practice those skills in my classroom. I feel like when I changed my approach from automatically telling students to move more toward trying to empower them with tools and habits to be their own lifelong teachers, it was a transformational shift in my professional growth from content expert to teacher.

A little “Afterward” here: Props to my mom. Growing up, when I asked a question she always said, “Go look it up.” It always frustrated the heck out of me. Internet?! Whatever. Kids these days have it easy. Back in MY day, “looking it up” meant a trip to the actual, physical library. In hindsight, though, I now realize she already knew that teaching me to be an independent learner was one of the best services she could ever do for me. Thanks, Mom!

**Week 6: March 2, 2014**

### [What will I do differently next time?](#)

I reflect about my teaching all the time. Probably too much...? I think maybe it’s possible – perhaps it takes some of the fun out? I think I need to go to Karen E. school and lighten up. :)

At any rate, back to the main point here: I reflect about my teaching all the time. It typically involves my brain silently hashing over what went well, what did not, and what I think I might do differently the next time. I find that I frequently tend to do this on the elliptical machine at the gym, in the shower, and/or while driving. (I call attention to this because these situations are perhaps not those imagined by those who have a rigid

view (\*COUGH!\* Accountability police \*COUGH!!\*\*) about when/where/how scholarly and meaningful reflection and revision should happen – i.e. in an office or at a formal meeting. But that is for another post.)

On the face of it, this exercise of analysis and reflection sounds straightforward, and as if it should lead to a simple solution. Sometimes it does. For example, over the years as I've had the opportunity to teach the same class many times, I have become mindful of the ideas and connections that tend to give students the most trouble. The amphibolic nature of the Krebs's cycle freaks out human nutrition students. The physiological basis for our need to breathe oxygen is not the easiest concept to grasp at first. The interdependence of the adaptive and innate immunity derails microbiology students. The war games amongst normal flora and pathogens and our human cells REALLY throws them... it's like Game of Thrones in your digestive tract! So freaking cool!!!! Sorry. Carried away. Anyways, I now realize these are tricky concepts so have spent a great deal of time revising the resources and activities I use to help students understand them. Piece o' cake! Problem solved, everyone learns, it's all good.

But it mostly doesn't work that way. In practice, why learning did or did not happen is usually much more subtle. Why is it that what went swimmingly one quarter is a train wreck the next? There are lots of factors involved, but I think it ultimately boils down to one central issue: the whole endeavor of teaching and learning involves human beings. Each class, each section of students, has a different personality, a distinct group dynamic. As the instructor I have a critical role in this, much of which is to ask compelling questions and to provide a safe place for students to be unsure or wrong. To help them become less uncomfortable when they feel unsure or wrong. My choice of words, or body language, or emoticon use, can make or break this. But I would argue that the students are equally if not more important here. One class may become synergistic learners, eagerly exchanging ideas, talking controversial issues and pushing each other's boundaries and having fun while they're at it. Even in the same quarter, though, another section may be flat. The issues that were compelling to one group spark no interest in the other. Learning activities that lead to a vibrant, energetic

classroom on Mondays and Wednesdays bring eye rolls and snores in the Tuesday/Thursday section.

What I'm getting at is, teaching is an art as much or more than it is a science. If society wants authentic learning and critical thinking in a college classroom, there is not a single, easy answer to, "What will I do differently next time?" It depends on the unique situation with one group of students on any given day, any given hour. I hope by now, 16 years in, I've got the "basics" down and am minimally competent at helping students become minimally competent with a particular topic. I want an "A" though, so I'm striving to gain skill at adapting on the fly. To be able to pull from a deep cache of teaching tools and strategies to engage each group to go beyond minimal competence with ideas they initially find utterly unimportant. On tuning in to the personality of each class and quickly adjusting activities when needed. And on being OK with myself if I don't pull it off every time! For me, these human dynamics in our classrooms are what make education a deeply worthwhile endeavor, and where the promise of meaningful learning and change ultimately lies.

What's going to happen when I write all that in TracDat? ;)

**Week 1:** December 31, 2014

[One of 7x7x25](#)

What does a photography teacher do on winter break? Practice what she teaches.... 1. Go to [Oakland Airport](#) (early of course) and visit the artwork – especially “Going Away, Coming Home.” Wonder at the layering of space, the transparency and the heartfelt marks on glass.



“Going Away, Coming Home”  
by Oakland artist Hung Liu

2. Get a window seat and take photographs out of clouds and wings with my iPhone. Adjust in Photoshop mobile...





3. Go to see first photograph ever taken at the [Harry Ransom Center – The University of Texas at Austin](#). Take pictures of the first pictures.

<https://www.youtube.com/watch?v=fBpYYaPp6vM>

4. Go to New Orleans. (more wonderful than I can say) See [A Gallery for Fine Photography](#), the architecture, the [cemeteries](#) topped off with a visit to the New Orleans Museum of Art (amazing photography display) and then the [NOLA sculpture garden! Inspiration!](#)



New Orleans Museum of  
Art Sculpture Garden

5. Then travel to Ocala to visit with [Martin O'Grady \(my father and a photographer\)](#). Still taking photographs at 83 years old. He just purchased a new Nikon D610 and is as excited as when he first started taking photographs 70 years ago. Together, we photographed, looked at historic family photographs, talked about photograph and enjoyed the holidays.



Martin O'Grady at the  
Weber Center train  
display

6. And, use every opportunity to make sample images for class. (This is an example of the use of Narrow Depth of Field and a telephoto lens (120 mm), for my beginning photography students!)



Train, Weber Center,  
Ocala, Florida

7. Finally, work on, dream about, write and design my next book, [one poem book no. 3](#). My own photographic projects move forward slowly, nurtured by determination and inspiration.



one poem book no. 3

How can I bring the creative life to my students and keep it alive for myself? How do I balance what is above with what is not there – – hours of Online Education Initiative meetings, planning for teaching in Winter quarter, answering seemingly uncountable emails? I strive to be a role model and have always said that if I teach photography, I must continue to practice what I teach. I look at photographs and other artwork, I make photographs; I look at photo books, I design photo books. Then I teach. As I walk in class and tell students to create and explore photography, I will share my own explorations and images. This is how I work to keep my teaching, my artwork and my life authentic.

*(Here is my start on the 7x7x25 – – for me the first of seven posts, over seven weeks with seven photographs and 25 sentences. I don't know if my next six posts will be as ambitious...but, well begun is half done...or in this case 1/7th done.)*

**Week 2: January 19, 2015**

## [Two of 7x7x25](#)

In this post, I consider again about authentic teaching and practicing what you teach. I am working on my next book project, [Wild Geese: one poem book no. 3](#). This project encompasses so many of the things teach in my classes.



1. The images were captured on film and I still teach students to use this materials. While digital capture is most common now, use of film still has its advantages and value in the classroom. (*Photo 1: Black & White Photography*)

2. I want all of my students to consider the meaning of photographs. My project of working with a living poet and interpreting their words with my images is a expansion on this and an example this concept.

3. I model the process and tools of modern photography. The film is scanned and using Adobe Photoshop Lightroom (*Photo 72: Lightroom and Photographic Design*), the images are organized. They are retouch and adjusted using Adobe Photoshop (*Photo 4a, b, c: Photoshop Photoshop For Photographers*).They are proof printed through Lightroom (back to *Photo 72*).



4. I will use Indesign for the design of the book and send the book to a commercial printer. (*Photo 71: The Photographic Book*)



5. I will produce and publicize this book and create exhibition prints for shows. This relates to our capstone classes – (*Photo 57a: Photographic Portfolio Development and Photo 57b: Professional Practices In Photography.*)

6. Through this entire process, I must persist and work through the challenges and the questions of creation from photographing to final project. This need

and understanding of process and of perseverance is essential to all of my teaching and classes.

For me, creativity, vision, practice, process, craft and practicality all blend to make this project and to inform my teaching. In my classroom, I also strive to bring both craft and vision to teaching. I use computers and pencils. I must blend the modern tools and technologies in the field of teaching and photography with traditional techniques

for engagement and creation. Often, I find myself racing to keep up with the latest and greatest; often, I remind myself that older tools have their place.



I use film and computers to make photographs. I use pencils and websites to teach. I look for the best techniques to connect with my students on all levels. Reaching into my

experience as a photographic artist, I teach photography but I also teach process, persistence and problem solving. This is my joy and role as an authentic teacher.



**Week 3:** January 25, 2015

### [Three of 7x7x25](#)

#### ***Authentic teaching online***

This is one of the greatest challenges, how do I bring my full self to my online students so that they have as rich an experience as my in-class student?





Here I am photographing at a Petroglyph site in New Mexico, then I show the photographs I made using different techniques.

With the use of photographs of myself and stories about of my work, I am in a unique position in my field of photography to bring more personal touch to both my on-campus and online classroom. But, I do think there is something to be said for the human touch in all of our online classrooms. From a welcoming message that truly welcomes and is sensitive to what students need to know yet has a personality to the use of tools like [Voicethread](#) and discussions in a way that give the student as sense of connection and responsibility to using an avatar that makes you approachable we need to consider our tools and create faculty presence.

As I worked with faculty in the Online Teaching Certification Class that I developed with Judy Baker and facilitated last quarter, I realize how common the desire is to create meaningful, authentic online teaching and how difficult this can be. In my work

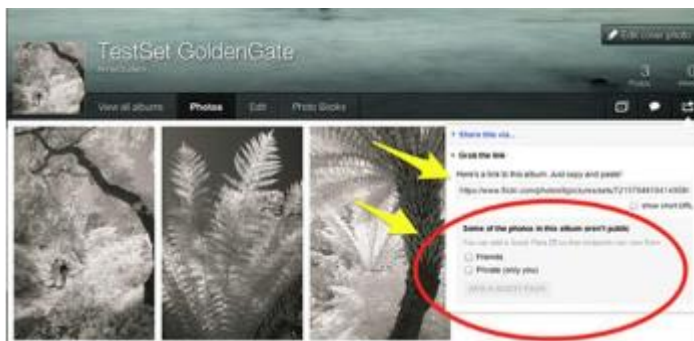


Martin O'Grady, Photographer:

I share the story and photographs of my father, a photo journalist for the Associate Press and Philadelphia Inquirer with my students.

as a Course Reviewer for the [Online Education Initiative](#), I see faculty struggling with technology that distances them from their students and yet, striving to create excellent, humanized and real online classes that touch students and encourage them to succeed. Like in the on campus class, the timely connection or comment can make a difference in a student's experience, so in the online class, a personal video, a email or message, something that creates connection can make a difference.

In on campus class, we can't always know why someone drops or stops coming, but in the online class it is even more difficult. I have tried to telephone and email to connect with my 'missing' online students, but sometimes we really can't know the why or the



Use of tools like Skitch to screen capture and send quick visual message to students.

circumstance. We are sending messages out with the hope that there is a receiver! From seeing student return to "class" or join a class in another quarter, I am encouraged not to give up on this effort.

For authentic teaching, each of the tools of connect must be used in the online class and used in a manner that evokes a sense of

really caring. As [Valerie Fong talked about in her 7x7x25 posting](#) this week, we need to create empathy. And yet, we are often call upon to create empathy through text and short messages. Can we rise to the challenge to use all of our tools and connect with the students?

How do you make your authentic? This conversation continues – in my work with the Committee of Online Learning and the Distance Education Advisory Committee, [we have this discussion and you would be welcome to join us!](#) I am glad to be part of trying to make online education at Foothill College better.

**Things we can do:**



- Send a personal message to each student once a quarter. Ask students to give you their preferred method of contact at the beginning of the quarter. (*Thanks, to Mimi Will for this idea*)
- Consider using [CCCCconfer](#) for office hours.



Here you can share your computer and voice and record the lesson for later viewing.

- Explore our new access to [VoiceThread](#), a way to easily put your voice in the online classroom.
- Use of tools like [Skitch](#) to screen capture and send quick visual message to students.
- Write each email or message with a picture in your mind of yourself as the recipient (perhaps yourself as a freshman in college?) and ask if you would feel supported and encouraged by this communication.

Celebrate your successes and be interested by the challenges!



**Week 4: February 2, 2015**

### Four of 7x7x25

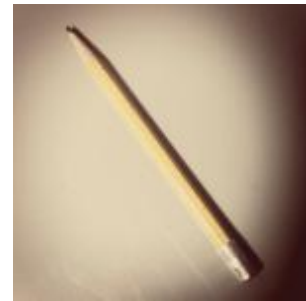
What do I do as a teacher? Well, of course I teach. I share information, demand (request) the completion of assignments, quizzes and exams and make various efforts



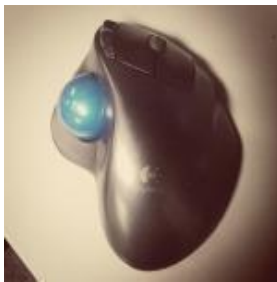
to have students engage with the information and show evidence of learning. I plan classes, present them and work with students on their classwork and their life plans. I answer emails, I hold office hours and I answer more emails. I am also on committees.

I am on a lot of committees. How is this part of authentic teaching?

I sometimes ask this and think I should pull back and just 'teach,' but engaging in the entire process of the college and contributing beyond my classroom is essential to me. Our efforts in the classroom are important, but much more has to happen to make the college run and our classes be accepted for transfer and degrees. More has to happen for our classes to be excellent, as they are. I am proud to be part of the process beyond the classroom.



What are some of the committees am I on and how to they add to my life as an authentic teacher?



Being on [Academic Senate](#) lets me connect with faculty from across the campus with very different opinions about what we are doing here and the best way to do it. Faculty are responsible for the [10+1, the areas of primary and joint responsibility](#) at the college and the Academic Senate is the place this gets discussed

and implemented.

Working as chair of the [Committee on Online Learning](#) has been the most rewarding for me. Talking about online learning and working across the campus to improve the quality of our online classes is such an important job. This growing area of our teaching is full of opportunities for interesting discussion and action.



I am also a Foothill Representative on the [Online Education Initiative Common Course](#) management System committee. This grant has many important aspects to address online learning statewide for the community colleges and Foothill was awarded the grant with Butte College and then was chosen as a [full launch college](#) to participate in the direct implementation of the choosing of the CCMS and in the course exchange. Through this committee, I have the experience of working with faculty and administrators from around the state and see different attitudes and aspects of online learning.



I have also worked with [Student Equity Workgroup](#), I have been on hiring committees and on tenure committees as well as serving on our division curriculum committee. I find that my committee work allows me to move out of my own area and



get to know faculty and administrator and staff from throughout campus and beyond. It lets me see other points of view and share challenges and solutions to those challenges. Sometimes these give me insights I can bring to specific students; always it makes me feel part of the Foothill community. This is an important thing I can model and share with our students – community and service. I

encourage every faculty to consider working on a new committee. It is an opportunity to grow and contribute. It makes my life and work interesting and rewarding.

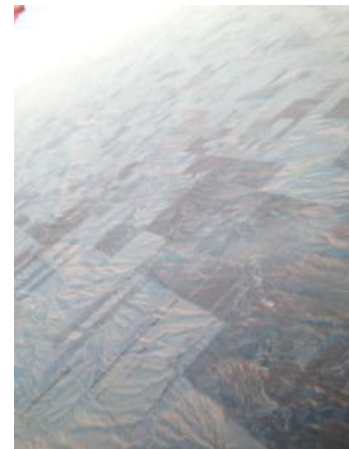
**Week 5: February 13, 2015**

### Five of 7x7x25



As we look out of the airplane window, we get a different view. From this height we can see so much more and so much less at once. As a teacher, I sometime ponder the 40,000 view. What effect do my efforts at authentic teaching have? In a world that moves so fast and in a job that sometimes seems to be more about submitting forms than igniting imaginations, what am I doing? My

experience of participating in the Online Education Initiative Common Course management system committee has helped me answer this and given me a view of what we do from both the ground level and from the 40,000 foot view. It was an inspiring experience. The selection process is still ongoing, but I can say after months (MONTHS) of weekly meetings, the OEI CCMS committee and the OEI steering committee *“announced its intent to award Instructure Inc. the contract to provide an online course management system and related services to community colleges statewide.”*



What are the important points of this decision ? (*Borrowed and expanded from the OEI CCMS email.*)

1. The committee of 55 members reached a nearly unanimous decision
2. There was overwhelming support for Canvas from students

3. Canvas offers an intuitive end user experience
4. It has a history of strong completion and success rate for students
5. Faculty user adoption rate at colleges has been significantly higher than other systems
6. Site visits and reference checks were overwhelmingly supportive of vendor product and was a confirmation of information shared by the vendor.
7. Canvas also offers flexibility for students to indicate a choice for how to receive notifications and course information.
8. Canvas offers an intuitive interface for faculty allowing for more time spent on pedagogy rather than on learning or teaching the technology tool.



You can read more about

the process here [on the TechEdge newsletter.](#)



There will be many conversations about this CMS and the process of conversion in the coming weeks, but to go with my “40,000 foot view”, I want to stop and note how inspiring it was to work with faculty, administrators and students who really cared about the quality of education for online students at the California Community Colleges. The quality of discourse, the thoughtful and collegial interchanges and the real time and

thought that all devoted to this task is connected the larger mission of what we do at the community colleges and what we contribute as faculty. I am excited about the opportunities this has given me to think about what is a good online class and how can I improve my classes to better serve students. It also gives me insights in ways I can assist my faculty colleagues in improving their online classes







and making them more student-centered. What I took from the months and months of work went into the recommendation process is the mantra “*What is best for students?*” Surely that is the best words to take to each day in our work as teachers and administrators and words to live by as educators. “*What is best for the students?*” as a touchstone is

the perfect intersection of the ground level perspective and the 40,000 foot view of education I can imagine and I am so proud of the work of the OEI CCMS committee that kept this thought at the center of all of their processes.

**Week 6: February 21, 2015**

### Six of 7x7x25



This is a bit of a ramble, but I have been thinking about my avatar lately. Not simply because my smiling face is appears in literally hundreds of posts in my online classes (although that is part of it), but because I have had to update it – – I realized that I don’t look like some pictures that to me look like me. Do you know what I mean? I have to face the fact that the face in my internal mirror is not the face that people see (especially after late nights trying to keep up to date with the above mentioned online classes...)



As I update my avatar, I think about the face that I show my students both online and on campus. As I think about the face in the classroom, the face as I walk on-campus and, of course, the face in that pesky small

photo that I use online, I ask some questions. Is this face welcoming? Is this face express that I am open to my students and their needs? Does it suggest a proper mix of professionalism and approachability? What is the face of the teacher? With each gesture, glance, and expression, we shape or try to shape our students. Sometimes it works, like when a warm smile makes a student feel welcome. Sometime it doesn't, like when a serious



look does not quite quiet the class or refocus



a discussion off the rails. I walk on campus and when I walk into my classroom, I am always working to create a welcoming place. When I post on my online class, I try to do the same even when it feels so different through the electronic wall. Recently, I have been using [Voicethread](#) in my online and hybrid classes, and here my small

photograph is supplemented by my voice. Students seem to respond to this positively.

They like the verbal feedback. I have tried some with the webcam, but I don't feel as comfortable watching myself talk.

What else can we do to make our students feel more welcome and encourage them to learn? I remember when a great teachers of teachers, Mike McHargue, (or as he was sometimes called Provocateur of Professional Development) told us that after all the studies of lecture vs. discussion and



different pedagogies, the one consistent predictor of excellence in teaching was



how much the teacher waved their hands. I take from that that my enthusiasm for teaching and for the entire education experience and for my students is not wasted. I wave my hands with drama, smile authentically at my students, and, of course, change my avatar regularly... I hope by these efforts that I can help a few more student thrive in my classroom both online and on campus. What do you do to engage your student on-campus or online? What more

can we do to make Foothill College a welcoming space?

**Week 7: March 1, 2015**

## [Seven of 7x7x25](#)



Sometimes a class is like a train speeding by. The entire thing blurs and you are not sure if anyone learned anything. Some classes are like a train that can't get out of the station. As you try to get the communal engine running, it just sputters and dies. And then, there are the magic days, like one of [my favorites children's books](#) when we all work together and we puff up the hill

of comprehension and achieve learning. I look to my actions, my skills in teaching when I try to understand the differences between these days – the get-through, can't-get-started and can't-stop-me days. While it is what is under my control I must address first, I also think about the students and what they bring to the classroom in attitude and readiness. There are



a number aspects to this. One is the outside circumstances of their life. I see students



that are harried from the commute, tired from their job or their family responsibilities, distracted by myriad of outside challenges and concerned about finances. It can be difficult for them to fully engage. These are real issues that must be addressed. Models like the City University of New York's [Accelerated Study in Associate Programs \(ASAP\)](#) are models that

we should consider when addressing these issues. In addition to this, I think there are cultural and behavior elements that we can also mitigate. Carolyn Holcroft shared an



amazing paper on the [“Choice Gap”](#) and the difference between some students abilities and belief in their abilities and how this impacts their lives. Here, I want to talk about another impact and behavior I see and I think of this as the digital impact. I have taught for many years, and I think that many of today’s students – of all ages – tend to see themselves as an audience



rather than full actors and participants in their learning. Television, internet, being taught to a test, and so many other factors of our current culture seem to add to this sense. I am presenting, or even worse, another student is speaking, and students are checking their phone, holding side conversation, working on their email. How do we teach students to be fully present? To read the text deeply and be actively engaged in the discussions and presentations? I try to model good behavior. I try to shape the conversations. When I student give a thoughtful answer I light up – I acknowledge even if the answer is not correct! I try to points out why that was a possible answer even if it is not the ‘right’ answer. I try silence (a very difficult thing for a teacher before a waiting classroom!!) until someone attempts an answer.

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I am honest with them – “You are in charge of your experience – You are responsible for your learning.” Sometimes it works. Sometimes I am calling into the wind. How can we get the train of learning to work for all of our students and help them understand that we are all the conductors of our own education? Authentic teaching is using all of your



resources to help your students learn, but it also has to be about rallying all of their abilities and skills for them to help themselves learn. I think I can. I think YOU can. I think WE can....learn!

**Week 1:** January 18, 2015

[The Bleeding Edge](#)



I've been thinking a lot lately about the difficulty of keeping up with the latest technology in my classes. In my field, Music Technology, there's an interesting split between foundation courses and electives. The foundation courses typically deal with basic concepts in audio engineering, as well as the fundamentals of using a digital audio workstation. In the case of the former, the basic concepts haven't changed much in decades; the signal path from microphone to pre-amp to recorder was more or less perfected by the Germans during World War II. In the case of the latter, I've been working with our primary software platform (Avid's Pro Tools) since the 1990s. These are subjects in which I possess a wealth of both academic knowledge and professional experience; both can be leveraged when developing, maintaining, and delivering courses. So far so good, right?

The core courses do remain relevant and will for the foreseeable future. (I guess that's what makes them "core.") But the core courses don't reflect the current direction of the department or our industry. In this case, the most logical direction is audio for video

games and other interactive media. (I'll get into the employment statistics supporting that case in a future post...) I've written a group of new courses that push us in that direction. But, due to the lengthy process of updating degree and certificate requirements, all of these new courses are currently electives.

So the problem here is two-fold: first, game audio is a relatively new field, so not many comprehensive textbooks exist; second, the industry changes so rapidly that the relevant hardware and software is constantly in flux. As a result, I not only need to write my own curriculum for each of these courses, but I'm aiming at a moving target as far as which technologies to explore. Sure, there are core concepts that remain constant just as they do in any field. But in this field even the core concepts must be taught on recent technology; the way the industry moves, a computer/operating system/software configuration from as little as two years ago can be hopelessly obsolete! And that's not even taking into account the type of computer, console, or handheld device that the consumer will use to play the resulting game.

The most challenging aspect of this situation is that I can no longer expect that I will be an absolute expert on the subject matter at hand. (A very uncomfortable position for someone who has always had subject matter expertise as a reliable crutch upon which to prop courses.) For example, I'm currently teaching a brand new course on advanced game sound design that uses a software application called FMOD Studio (see post below). But I didn't truly begin learning the software until last month! (The application itself is only about a year old...) For the first time in my professional career, I find myself hoping that no one deviates too far from the lecture agenda and uncovers my ruse! Just kidding. Mostly.

But it's actually working out beautifully. I've found that an essential aspect of teaching college students, which I've had the good fortune to do for the last several years, is letting go of the ego that you acquired through working successfully in the private sector. And now I'm going a step further and letting go of my need to know everything about a subject (or a piece of software) before I feel confident in my ability to teach it to students. I'm incredibly excited to teach this new material because it's new and fresh to me. (Perhaps it's the adrenaline?) And students are definitely picking up on that and

getting excited, too. Perhaps exploring a subject together with my students is the only realistic way to maintain the kind of agility that developing relevant courses requires.

**Week 2: January 25, 2015**

### [Do Industry Certifications Matter?](#)



I teach in the Music Technology program at Foothill College, and I really enjoy the duality of teaching both academic and vocational courses. It gives me a flexibility in course creation that simply wouldn't exist at a four-year university where career training (if it even exists) takes a backseat to ivory tower academic pursuits.

Many of our vocational courses are focused on software training for a number of important audio applications including Avid's Pro Tools, Apple's Logic Pro, and Ableton Live. These are some of our most popular courses at Foothill, and in the case of the Pro Tools courses they are even required for the degree and certificate in Music Tech.

One of the questions I frequently get from the students in my vocational classes is, "Do Industry Certifications Matter?" Unfortunately, my response is often something like, "Well, that depends..." And it does depend on a lot of factors. For someone who already has credits in the industry, an industry certification (IC) is somewhat meaningless; there's no question that real-world credits trump theoretical expertise every time. I often

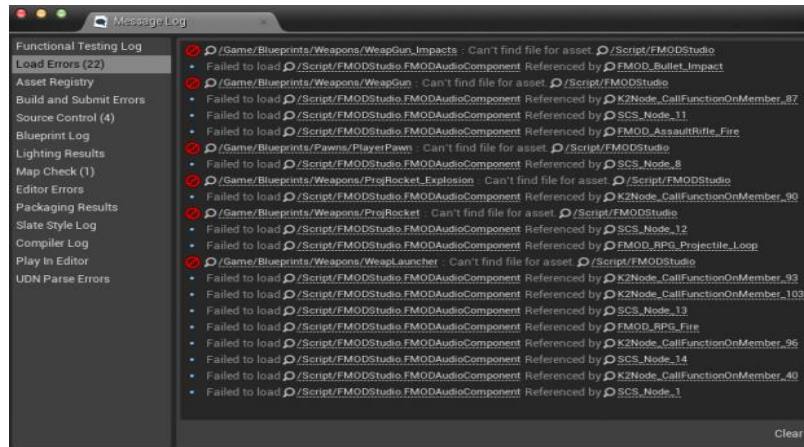
joke with my students that you won't find many Grammy winners with a bunch of certificates posted next to the gold records on their studio wall. (The fact that many famous producers and engineers often work in a manner that is anything but efficient is a topic for another time...)

On the other hand, for someone looking to make a career change, the IC can provide a clear training path resulting in significant expertise in an industry-standard application. For example, I often have older students that are successful in a field such as video editing, but wish to add sound design or audio mixing to their CV. In this case, the certificate can impart the necessary confidence to present themselves as an expert in the adjacent field.

Finally, for students with no industry experience, the IC can help to differentiate them from other job candidates applying for internships or entry-level positions. I've worked in several organizations where ICs were required to make it through the first phase of job application screening for an internship. While it is true that creative industry ICs like ours are not valued as highly as something like a CISCO or MSCE certification in the IT industry, they do have significant value. Many creative organizations build their entire workflow around one software application (like Pro Tools or Adobe Creative Suite) and our certified students can typically demonstrate much deeper expertise in that application than a senior designer. Does this mean they can do the job better than that person? Absolutely not. But junior personnel in creative fields are often EXPECTED to possess deep knowledge of applications so that they can impart that knowledge to more established colleagues who simply don't have the time to stay on top of every new feature. Sharing this knowledge in a humble, un-selfish fashion has been a key to advancement in our industry for decades.

Week 3: February 1, 2015

## The Bleeding Edge, Pt. 2



So, I've previously mentioned several new game audio courses that I've developed for the Music Tech program at Foothill College. (Actually, one of them is still just an outline that needs to be developed for next quarter, but I digress...) These classes are as cutting edge as we get in our industry, and there are some serious complications that come with exploring uncharted territory. When I wrote the very first edition of Avid's *Pro Tools for Game Audio* textbook back in 2010, I had to figure out how to demonstrate the implementation of audio assets into an actual playable game. (The Pro Tools aspect of the book was no problem.) This required a great deal of research into available game development "engines," of which only one was truly viable at the time: [Unity](#). Unity was great because it had some decent audio capabilities, offered a number of demonstration game levels that could be used for the class, and especially because it's free to use for game projects that generate less than \$10,000 in revenue. (Ding! Ding! That's definitely our situation...)

So we started down the path of using Unity for Avid's book. We grabbed a couple of game levels, and spent a few thousand dollars having a programmer customize them for the book exercises. It mostly worked well, with a few back-and-forth development cycles and no major issues. Then, just as we were going to press with the book, Unity



released a new version of their engine that broke some aspects of our game levels. Yikes! Nothing like that had ever happened with previous textbooks that I edited or authored. We scrambled to make some quick changes and went to press with about 98% functionality. In other words, I shipped a book that featured a software component that had KNOWN BUGS. All of a sudden, I was in the software development business in a way I hadn't ever imagined. Anyway, we're on the third edition of that book now. And there have been hiccups with the game levels that shipped with every edition.

Fast forward to Fall 2014. With the Winter Quarter quickly approaching, I found myself in a familiar position; I needed to put the final touches on the course materials for my *Advanced Sound Design for Games* course (which I'm currently teaching.) I had always planned for this course to use FMOD Studio (see below ad nauseum), but I needed to decide on a game engine (yet again). I really wanted to try something new after having used Unity for the past few years. Fortunately, the [Unreal Engine](#) from Epic Games had just added both a Mac OS version and FMOD Studio support a few months earlier(!). Now any logical, non-masochistic course developer would probably have run screaming in the other direction at the thought of building a course around an application that was effectively brand new. I am not that person. I jumped in head first and scrambled to make things work. And would you believe, it's actually going pretty well. But not perfectly well.

The first major issue occurred when I built the course exercises around a "First Person Shooter" game template. I put in several weeks of work preparing the game, which put me at about the 75% completion point. Then, one day, I loaded up the game and got a bunch of errors. Showstopping errors. And because I was working in completely uncharted territory no one at Epic or FMOD could provide the assistance I needed quickly enough. Did I mention I was pretty much working on Christmas day? So I scrapped the "First Person Shooter" template and found a much more simple template. This one was missing a lot of the cool stuff that I hoped would impress students, but it was much easier to adapt to my course exercises. And everything went off without a hitch (at the eleventh hour of course). I packaged up all the files, uploaded everything to my Google Drive, and started teaching the class.



Ah, you probably guessed that wasn't the end of the story, right? So, things went pretty well until about the third week of class. For a variety of reasons, several of my students were running the very latest Mac OS ("Yosemite"). **Sidebar**—Industry Pros know to NEVER update their OS unless they have a very good reason to make the move, and they certainly never upgrade in the middle of a project. But these aren't Industry Pros.—**End Sidebar**. And they quickly discovered that some basic functionality in FMOD Studio was not working. To their credit, FMOD quickly released an update that addressed the issue, but the deadline for the exercise had already passed. So, I was forced to extend the project deadline to accommodate those students. No big deal, really. But did I mention that the new version of FMOD Studio fixed the Yosemite problem but broke the functionality with Unreal? For a few more days anyway.

Yeah, that's my life... I do it to myself. My wife always jokes that "college professor" is supposed to be the world's least stressful job. And I always respond, "Not if you're doing it properly." And sure, I could back away from trying to keep students right up there on the cutting edge. But I just can't help myself.

**Week 4:** February 7, 2015

### [Contract Grading](#)



Many of my colleagues have moved to what is considered a “modern” grading model in their online and face-to-face courses. Typically, they make a large number of points available that embrace various learning modalities, and then use some fraction of those points to determine the student’s final grade. For example, a course might make available 3000 points distributed across modalities (traditional quizzes and exams, individual and group projects, writing assignments, etc.), with 2000 points required to achieve an “A” grade. While other instructors seem satisfied with this model, I’ve never been willing to make the leap without the addition of one other component: a **grade contract**. While the grade contract seems to be common in K-12 (especially for students deemed “gifted and talented”) , I haven’t personally witnessed its implementation in my field (Music Technology). Before we jump into that, let’s rewind and talk about my teaching background for a minute.

Before I began teaching at the college level, I spent many years as a technical trainer in the private sector (and I still pick up those gigs occasionally as my schedule permits). The subject matter was audio hardware and software, and the students were typically professionals looking to obtain an industry certification. Aside from the type of student, there was one major difference between those classes and the classes I teach at my college: no grades. As a result, I had never failed ANYONE in a decade of classroom instruction. That’s not to say that every single student passed the relevant certification exam(s), but the vast majority did.

Next, let’s jump ahead to my first college teaching gig; I was hired to teach at a large state university where my students were a mix of degree students and certificate students. The dichotomy between the two groups of students was stark. The degree students were typically younger and more academically skilled, with limited industry experience. The certificate students were typically older and not very strong academically, but frequently possessed work experience (or life experience) that was helpful in these particular courses. For the first time, I had students who aced the class but weren’t really prepared for professional work, and students who achieved a failing grade but definitely gained useful skills that could be immediately applied to their current occupation or could help them to make a move to an adjacent field. At the time, it never

occurred to me that I wasn't being fair to the certificate students! In hindsight, I feel that the certificate students would've benefited from a more flexible grading structure that more accurately assessed their success. But I was coming from a world where grades didn't exist, and so obviously hadn't been exposed to other grading models.

So, what about my current role? As I mentioned above, I've had a chance to watch some of my colleagues implement other grading models. And I have a fundamental problem with the implementation. You see, without a contract that determines exactly which assessments will be graded, students will tend to complete all of the available assessments. Now, of course, some students will put in the effort to do very well across all of the assessments. But common sense tells us that other students will recognize that mediocre or even poor performance is sufficient to achieve a good grade and will therefore put in a minimum of effort. (I'm continually amazed at how students who don't don't apply themselves in the traditional fashion can become incredibly resourceful when it comes to gaming the system!) So, in the example above, that means that a score of 66.6% on every assessment will result in a 100% grade for the class. This idea drives me nuts! From the first time I became aware of this model, I knew more-or-less intuitively that some sort of contract was needed. And, after doing a bit of research, I discovered that a Grade Contract (sometimes known as a "Contract Activity Package") is almost always used when this grading model is implemented in K-12 programs.

There's no doubt that implementing Grade Contracts creates more work for the instructor. It falls to the instructor to figure out how contracts will be structured and then assess student success based on the contract. In our online learning management system (which I use as the gradebook for face-to-face classes as well) there is no easy way to manage such contracts and generate an automatic grade for multiple pathways through the available assessments. Regardless, I'm planning to restructure at least one of my courses next year to embrace Grade Contracts. In our LMS, I'll need to figure out if doing the pre-work to limit access to assessments is more efficient than overlaying the contract on completed assessments at the end of the course. But I do believe that the results will be worth it, and that a more diverse group of students will be able to successfully complete my classes. Wish me luck!

**Week 5: February 14, 2015**

### How Did I Get Here?



When I was a kid, I was a pretty good student. I didn't study very hard, but that didn't seem to make much difference. I was always good at taking tests, and that carried me through even though my study habits were not that great. (Actually, that didn't work so well in college Calculus, but that's no big surprise.) Anyway, it's kind of funny, considering my current career in education. Or perhaps its not so funny, when you consider that government officials, educators, and even parents are more obsessed with test scores than ever. Come to think of it, maybe this IS where I'm supposed to be. Who knows...

Anyway, the one thing I did consistently work hard at throughout my childhood was music. I started on the Piano at the age of five (six?), and continued studying, performing, and composing music in one form or another until this very day. In those days, the arts were considered an enrichment activity and not essential to success in life. And I find it somewhat unbelievable that this general attitude towards the arts continues today. Even after study after study shows that exposure to the arts is beneficial to children, arts programs are always the first to go when money gets tight. Well, it's either the arts or physical education, which in my humble opinion is almost but not quite as appalling.

In hindsight, I can see a couple of things that very clearly influenced my decision to pursue music and audio engineering (and eventually education) as a career. First, my parents were both musicians, so in our household everyone played music and it was really no big deal. Growing up in that kind of environment pretty much guaranteed that I would be something of a musician no matter what else I chose to pursue. I'm pretty sure that's what kept bringing me back to music on the few occasions when I got burnt out on a particular instrument or style of music. As I got older I would just bounce around to another instrument or style of music (or some new piece of music technology that my mother, bless her, was willing to pay for) and continue on.

And there was a second event, this one much more specific, that led me down this path. My mother was a psychologist and worked with medical students from one of the local medical schools. As a result, she developed a close personal relationship with the dean of that medical school. (I believe she was Greek, like my mother, which was probably a factor as well.) One day, when I was about sixteen, my mother decided that I should have lunch with the dean to talk about medical school. I can't remember much about the conversation, but there was one tidbit that stuck with me: She told me to major in music in college. Now, I know what you think I'm about to say; that she thought I should pursue my one true passion and career be damned, right? Wrong. She told me that music majors had the highest rate of acceptance into medical school. What? No, not that most doctors were music majors. But that music majors were accepted at a higher rate than any other major (including classic pre-med majors like biology and chemistry). So, I went of to college and majored in music. I gave up on pre-med a couple of years later, but that's another story.

So if med schools (whom we'll assume know something about choosing strong applicants) are desperate to get more music majors, why do we still consider arts education to be a luxury as opposed to a necessity? If I had to venture a guess, I'd guess that its because of the current cost of education. If education were cheaper (or free?), I believe more parents would be supportive of their children who show an interest in the arts. But in the current reactionary education climate, even parents who innately understand the value of arts education are willing to throw the arts out the

window when school budgets (and student loans) enter the conversation. Hey, we're falling behind much of the rest of the world in math and science education, right? Everyone, FREAK OUT! My question is, where do we rank in arts education?

**Week 6: February 22, 2015**

### [Call Me, Anytime](#)



I give my mobile phone number to students. There, I said it. I give them my personal mobile phone number. It's not a shiny red "Bat Phone" that I reserve for student calls. It's my everyday phone that I use to call my wife, receive calls about freelance gigs, check email, read Twitter feeds, and map the fastest route to school (gotta love Waze!). As a matter of fact, I don't even know the phone number in my office at school. I think it's x7949, but I'll bet I'm off by a number or two.

I'm always amused by the reactions of my colleagues when I tell them this. They range from shock to sympathy to accusations of masochistic tendencies. And then the questions start. "Don't you get calls at 3AM?" No. "Don't they send you a ton of text messages?" No, although I do get the occasional annoying text message where the "texter" (is that a word?) fails to identify themselves or the class in which they are enrolled. I've been doing this for three (school) years now and it's really not a big deal.

You see, most of my students come from a generation that will avoid making an actual phone call at any cost. I find it kind of amusing, actually. I've got over 150 students this quarter and I can easily count the number of phone calls I've received from students on two hands. They just don't call, even when they should! And I suppose even these students respect the title of "College Professor" enough to realize that text messages are probably a little too informal. (They certainly don't hesitate to send off email messages; I guess they see that as a step up in the hierarchy of communication formality...)

Initially, I refused to use my office phone because I'm only in my office a few hours a week for office hours. The rest of the time I'm on campus I'm either teaching a class or working in one of the labs or the studio. And guess what, students can actually find me in the lab or studio by calling my mobile phone. That sort of makes sense, right? I don't even know how to set up my office voicemail. Why would I want to call in and check voicemail on yet another annoying phone system? It takes me back to the days when I had a landline at home, or even further back to when I had an answering machine with those little cassette tapes.

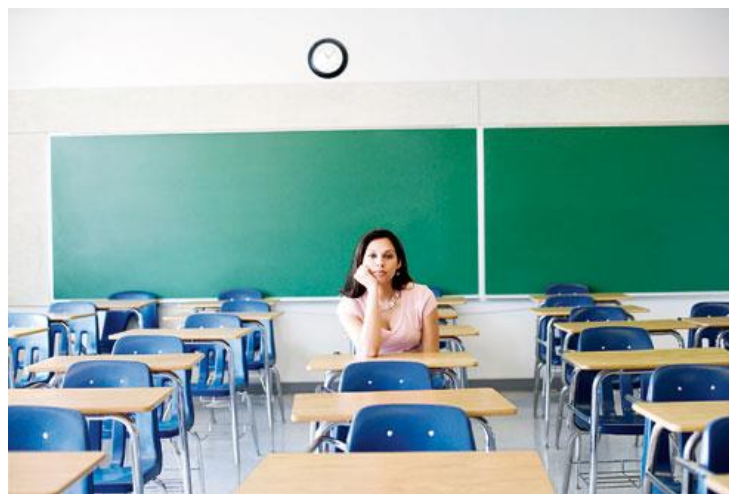
I find that my college has a weird attachment their landline extension system. I haven't had a dedicated phone number at a private sector job since 2008. There are some forms I fill out at school that ask for my extension, and I just cram my mobile phone number into the space. Same with online forms, although sometimes they only allow four digits so I leave it blank.

I guess ultimately the decision to give out my personal number comes down to a simple premise: I'm a full-time instructor. I don't believe there's any ambiguity to the term "full-time." Sure, I can make myself inaccessible when I'm not physically at school, but I choose not to. I consider myself to be "on-call" during core hours for student interaction, which I find to be something like 10AM to 7PM. And, ultimately, making myself more accessible saves time and headaches because I don't need to return a bunch of calls at a later time. I suppose the only thing I dislike more than landlines is a backlog of student communication. I want my students to feel valued and respected, and timely communication is a huge part of that. And I get a kick out of the typical student

response when I answer the phone: “Wow, I can’t believe I called you and you answered.”

**Week 7: March 1, 2015**

### Showing Up Is Half The Battle



I’ve been teaching full time for almost three academic years now. In that time, I’ve learned some valuable lessons about myself, my students, and my field. One thing that has become very clear is the difference in student success between those students who participate every week, and those who do not. I just finished grading midterm exams for one of my online music history classes, and the grades were quite predictable. Students who log in every week almost always get an “A” on the midterm or perhaps a “B”, while students who only occasionally log in achieve much lower grades. And I mean MUCH LOWER. There’s a crazy inverted bell curve that occurs in many of my classes, and this class is no different:

#### **50 Students Total**

(21) A

(12) B



(4) C

(3) D

(10) F

So, if we correlate those grades to online class participation we can see a clear connection. The “A” and “B” students log in every week without exception. The “C,” “D,” and “F” students log in with less frequency. The sad part (for me) is that I can look at the login stats and know that most of those “C” and “D” grades will become an “F” by the end of the class. But the inverse is also true; many of the “B” students will achieve an “A” by the end of the class (they probably just got off to a slow start and are just getting things figured out). Oh, and almost every student with an “A” at the midterm will finish with an “A.”

I’ve tried a lot of strategies to bring the low-performing students up, but they almost never seem to work. I send reminders, and even occasionally personal notes. I ask them to contact me if they need assistance. It’s very different from a face-to-face class where I can see significant improvement from just one small intervention. But the face-to-face students are a different bunch, especially considering that they are choosing to come to class over taking the class online. (All of my face-to-face classes have a corresponding online-only section.)

Anyway, this is something that I think about at midterm time every term. It kind of gets me down, but after three years I’ve been forced to accept that an (unacceptably) large percentage of my online students will not be successful. But it also creates a talking point for my face-to-face students. In some ways (not all), success in school is similar to success in life; showing up is half the battle.

**Week 1:** December 18, 2015

**The Climate Crisis in Education**



There are two Climate Crises in American higher education.

The first Crisis is a chilling climate of intellectual and emotional isolation: the sense that we all work and study in our so-called silos with no contact and nothing in common with others on campus. For students this means marching robotically through scarf-and-barf tests to complete checklists of requirements which seem to them useless. For faculty it means trudging dutifully through stacks of mechanical grading and perceived bureaucratic b.s.

The second Crisis is a *de facto* state of Climate Change Denial infecting our entire curriculum. In the words of Naomi Klein's brilliant new book, *This Changes Everything*. Yet in our day-to-day teaching at Foothill College, Climate Change has changed nothing. Most of us do not teach about it. We do not talk about it with our colleagues. We do not even acknowledge or address it in our institutional long-term planning (where arguably it matters most).

Could it be that our collective curricular silence around climate change and our own individual isolation are flip sides of the same coin?

Could it be that our collective curricular silence around climate change and our own individual isolation are flip sides of the same coin?

If so, then catalyzing Climate Change across-the-curriculum helps confront them both.

Why this climate of crushing silence? And in the heart of California's Silicon Valley, no less--arguably the epicenter from which many of the best possible solutions must originate?

Presumably, if polls are any indication, well-educated Americans (Foothill faculty included) accept the reality of Climate Change science overwhelmingly. The deeper problem is that most of our students don't. Worse yet, a perhaps even larger number suffer from a kind of learned ignorance--they don't know and don't care. So teaching climate science, climate policy, and climate change involves confronting a brick wall of student denial. And therefore means, in effect, abandoning our cherished stance of political neutrality and impartiality to push students to confront their own ignorance--and their own alarming future.

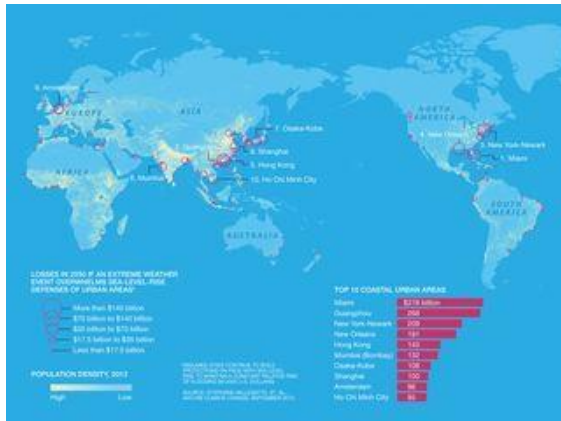
Yet why then -- in a field which has bravely pushed the boundaries of social change for at least the last century (amid the pitched battles for Civil Rights, Women's Rights, Gay Rights and other ongoing struggles)-- do we shrink engagement and confrontation in the face of climate-driven catastrophes that threaten to drown or starve or dry up these social justice victories completely? I have no problem with -- and no apologies for -- directly confronting student racism and sexism and homophobia and class prejudice in my own classroom. The same goes for challenging students who don't believe in Evolution. Or those who smoke on campus. Why then do I shrink from confronting their climate change denial more directly?

The goal of this blog, therefore, will be to explore various ways in which teaching Climate Change across the Curriculum can catalyze deep learning--both for our students *and for ourselves*.

In the words of Henry Adams, "A teacher is an adult paid to lie to children." If we want to prove Adams wrong, we have to treat our students (and ourselves) as adults. That means seriously taking the title of Klein's book to heart, both as individuals and as an institution: *This Changes Everything*. Earth to Faculty: Are you in? Game on. Bring it. As one of my Stanford professors was fond of asking us back in grad school: "So you all want to be a Professors, eh? Well what the hell do you have to Profess?"

Week 2: January 25, 2015

## When Will Onizuka Be Underwater?



By taking "When will Onizuka be underwater?" as my mantra, I don't mean to call out Foothill College as acting any differently from a host of far better-known Bay Area institutions. Google, Facebook, UCSF, the 49ers, and literally hundreds of smaller organizations are just as busy as we are building their own state-of-the-art sea-level facilities. All of them soon to be underwater, alas. Why should Foothill College

be any different?

Or Miami Dade Community College District for that matter? For even as I write this post, a new issue of *National Geographic Magazine* just hit the news stands containing a feature story on the city of Miami's increasingly frantic efforts to fend off the floods and hurricanes of a looming climate change catastrophe --including marketing high-tech floating villages to the super-rich, who will presumably weather the storms on floating private man-made islands anchored to the center of already-existing lakes in South Florida. As *National Geographic's* headlines blared, "Florida's bill is coming due, as the costs of climate change add up around the globe. Adaptations will buy time, but can they save Miami?" [To Read the New National Geographic Article Click Here.](#)

Note that I said "when" not "if." For according to *National Geographic*, the title of this blogpost might just as easily read "When Will Miami, Guanzhou, NYC/Newark, New Orleans, Hong Kong, Mumbai, Osaka/Kobe, Shanghai, Amsterdam, and Ho Chi Minh City Be Underwater?"-- just to list the top ten global capitals most in danger of inundation. With economic damage of "up to 140 billion" per city "if an extreme weather incident overwhelms sea-level-rise defenses" by 2050 (a scant 35 years from now), Onizuka is in good company.

Even so you might think FHDA and its expensive architects might have taken all this into account in constructing our new campus, but you might be wrong. I should know. I asked the architects, in person. The Romans constructed their buildings to last for



millennia; we build campuses to last for the time-being. *Carpe diem.*

By now you might be wondering what all this has to do with teaching and learning. If so, perhaps that famous cabinet meeting staged underwater as a Climate Change protest by the parliament of the Maldives might serve as a model classroom of the future. As indeed it should: because my whole point here is that

teaching-and-learning about Climate Change only seems to gain any real emotional traction when it is made local, made personal, and made expensive.

In other words, perhaps the best way for our students to "get their feet wet" studying climate change is to encounter it face-to-face in their own backyard. Or in our own Back Bay. If so let's simply rename Onizuka the new "Foothill College Center for the Study of Unsustainable Structures" and get on with it. Just remember to request a classroom on the ground floor. Talk about immersive learning! Bubble bubble. Glug glug glug.

On a more serious level, the eco-history of Onizuka is itself deeply complicated -- and deeply compelling. Prior to the founding of the Mission of San Francisco in 1776 it was a vast and spectacularly-productive marine wetland that could make the Everglades look barren -- supporting a thriving population of Native American tribes along its shores. Today a less than 250 years later more than one-third of the entire extent of San Francisco Bay has been landfilled to create the sprawling suburbs and industrial warehouses we call Silicon Valley. Indeed any flat land you see almost anywhere in the Bay Area is almost certain to be landfill (and hence a few scant feet above our current, and rapidly rising, sea level).



To further add to this irony the CIA's notorious Blue Cube (that Bureaucratically-Byzantine building that our new Onizuka campus replaces) was in fact a completely windowless structure. Yet one which for decades housed a top-secret global communications network of unparalleled scope and power -- and from which Armageddon itself might have been directed. Now there's a breathtaking mashup of blindness and vision that

could make even Kafka turn blue with envy. Could there be a more poignant symbol of our relationship to the Blue Planet we all inhabit than the now-defunct Blue Cube -- and our own soon-to-be-submerged state-of-the-art "educational" facility?

So perhaps the best way to kickstart meaningful Climate Change Studies Across-the-Curriculum would be to kick the dirt beneath our feet -- before it turns back into marsh mud.

If not I hereby propose we replace our college mascot, Hooty-the-Owl, with Onizuka-the-Ostrich.





**Week 3: January 28, 2015**

### STEMming the Tide



As usual, my teaching/learning limitations say much more about me than my students.

Case in point: when a new edition of my favorite textbook inserted an article on nuclear waste storage – penned by former CAL physics prof Robert Muller, who believes nuclear power can solve the Climate Change crisis – I quite literally blanched at the

thought of assigning anything "so technical." Could Foothill students possibly be expected to make their way through such a minefield of radiation decay data and come out alive? Or at least awake?

Nevertheless I dutifully assigned the article—but only as an essay option.

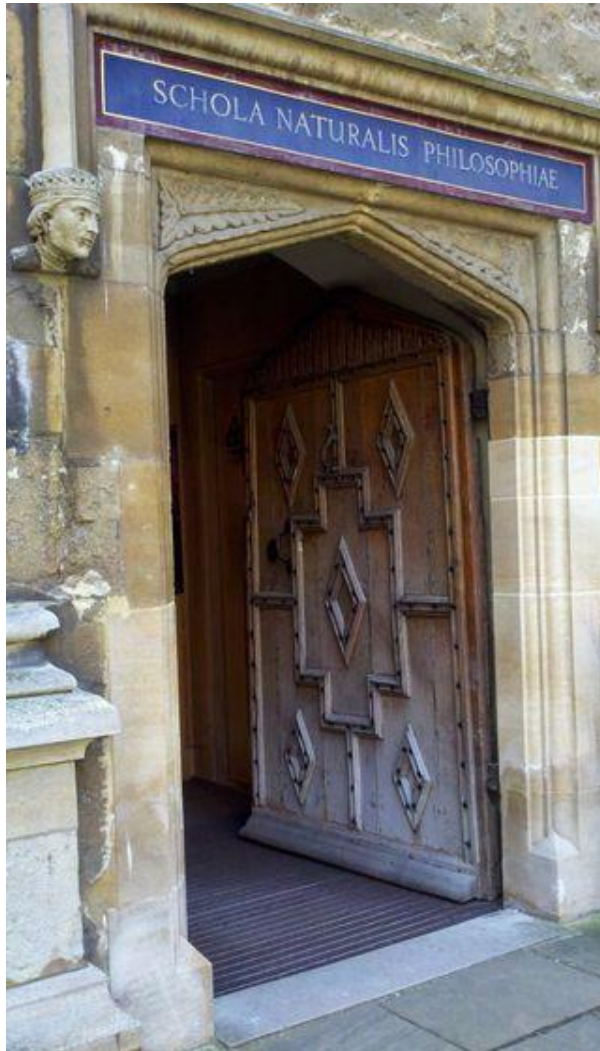
Imagine my surprise, therefore, when six astonishingly well-argued, thoughtful essays about nuclear waste and climate change politics landed in my inbox. Better yet, their arguments ranged from a vigorous defense of Muller's thesis to provocative critiques of his underlying assumptions.

Given the complexity of Muller's arguments (and the sophistication of the students' responses) I was quite literally stunned—and grateful.

For by challenging Muller's underlying assumptions those students had challenged my own underlying assumptions as well.

Confession: Too often we humanities faculty, including myself, thoughtlessly avoid STEM topics – even though the numbers of STEM students in our required classes are growing exponentially (at least if campus-wide and nationwide trends are any indication).

Now don't get me wrong: I'm just as eager as ever to expose STEM students to the liberal arts. Yet how often we forget that the traditional concept of the liberal arts emphatically included the sciences and mathematics.



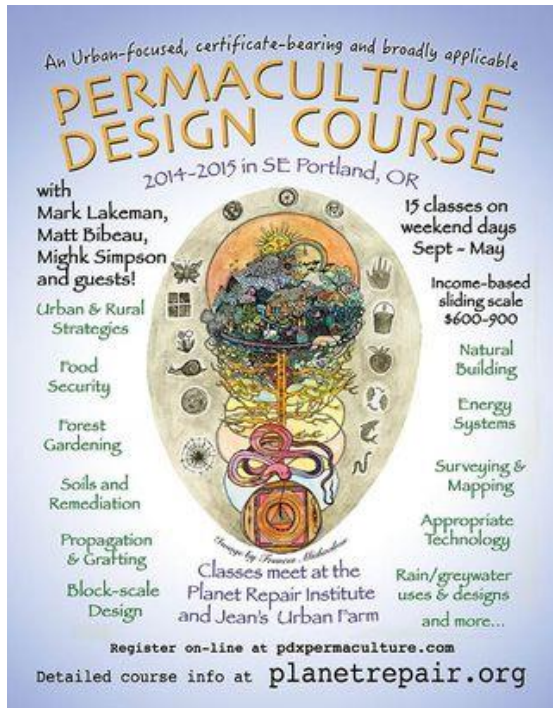
In fact, I was recently reminded of that fact quite viscerally while helping to lead an FHDA tour of Oxford this fall quarter, as part of our campus-abroad program in London. There on the medieval carved doors of the Bodleian Library (among Europe's oldest) were the same "departments" we work in today. Admittedly there was no door marked STEM--even in Latin. Yet each of the fields those letters represent today was represented, in some form, then also. The *Trivium* and the *Quadrivium*, as they used to be known -- and as Trivial Pursuit players would recognize today. Doors on which, in one case, Astronomy and Rhetoric appear together. Would it were still so today--talk about Climate Change across the Curriculum! So who's feeling kinda trivial now? Me.

Insight: Maybe if those of us who do teach Arts and Humanities were to give equal attention to those "other doors of learning" -- by using the rich resources of climate-based science writing -- we might better engage and empower not only our own students but ourselves.



**Week 4: February 1, 2015**

## [Student Perspectives on Climate-Change-across-the-Curriculum](#)



I recently asked my Foothill student friend José Beltran (a Canadian/Mexican Philosophy major at Foothill) to respond to my 7x7 blog posts on Climate-Change-Across-the-Curriculum. Admittedly José was never “my student” directly. Instead we met during campus Earth Day events several years ago—and have remained active correspondents on ecological issues ever since. Not many Foothill students devour a book-per-week on eco-philosophy. But José does so routinely. That makes José exceptional in more ways than one.

Alas several years of effort by myself and several colleagues to re-start some kind of ecology club on campus have fallen flat—even though, way back in the 1990s, the Foothill Green Futures Club was by far the largest and most active on campus.

What happened? How could the student climate on campus have shifted so far away from environmental issues in twenty years?

Here’s one clue perhaps: José’s first response to my previous blog posts reads as follows: “The only classes in which I learned about Climate Change at Foothill were Hort 10 and Bio 9.” Props for the Biology department! Shame on the rest of us (me included).

José’s second response, brief as it is, also intrigues me: “But they could teach Climate Change in Math and Sociology easily.” True that. Of course we could do it more

often—or always—in English, History, Art, Communications, Humanities, and other fields as well.

The rest of José’s analysis speaks for itself . But does it speak for us—or about us??—also?

“Part of the neoliberal global economy’s character right now is that it is constitutionally incapable of promising action by the world’s leaders since the globe runs on oil. Climate denial is a symptom of the global system. To drive this point deeper, consider that if the global economy switched to renewable energy much of the powers’ geopolitical strategy would be rendered irrelevant. The ball is in our court. Permaculture!”

My question: would teaching climate-change-across the curriculum render us at Foothill similarly “irrelevant” also? Or vice-versa?

**Week 5: February 8, 2015**

### [De Anza's Climate Change Champions](#)



Speaking of permaculture, let’s have a look down the road at our very own sister school, De Anza College.

Caveat: We all know that NorCal presents fierce micro-climate contrasts: on any given day, it’s often blue-sky hot and sunny on one side of the Peninsula; bitterly cold, windy, and foggy on the other. So too with our own district microclimates. Alas, these days I fear that much of the fog and cold lies on our side of the great district divide.

De Anza Exhibit A: during my 25 years of service to the District, De Anza has built a state-of-the-art Environmental Studies Center, housed in a gorgeous LEED Platinum

sustainably-constructed building, containing a thriving community of full-time and adjunct faculty, staff, and (most especially) students.

It's called the Kirsch Center <http://www.deanza.edu/kirschcenter/>

Never seen it? Well worth a visit!—although I'll confess it turns me green with jealousy. Extensive organic gardens using on-site rainwater to reduce irrigation. Large student cohorts studying state-of-the-art environmental studies issues. Clubs. Recycling. Their own publications. Speakers series. The list goes on and on.

So the goal of building Climate Change into a community college curriculum on a grand scale is certainly no pipe dream or daft utopian vision I'm spinning right here in these cyberpages. It is a daily, vibrant reality right down the road at our own sister college—thanks to the joint leadership and vision of a whole generation of faculty, staff, and community members who raised the money, fought for their vision (and won).

Just like De Anza, I'd like to see Foothill leverage our own crucial location in the heart of California's Silicon Valley to become a true leader in Climate Change education—locally, regionally, and internationally.

Loyal Foothill partisans please don't despair. I'll have more to say about what Foothill is doing right now – and doing right! – in a subsequent post.

**Week 6: February 22, 2015**

### [Cardinal Climate Change](#)

In addition to De Anza, there is of course at least one “other” Junior College just down the road from Foothill doing visionary work with climate change curriculum– or rather a Junior University. I am referring, of course, to Leland Stanford Junior University: a school originally created as a tuition-free open-door institution “for the children of California.”



As I write, the new Stanford Education Partnership for Internationalizing the Curriculum (EPIC) is actively soliciting community college faculty proposals that would fit perfectly into a Climate-Change-across-the-Curriculum paradigm shift.

<https://sgs.stanford.edu/programs-centers/community-engagement>

In short: Getting our neighbors at Stanford firmly behind a Climate-Change-Across-the-Curriculum effort could go a long, long way toward insuring both increased success here on our own campus but also increased regional, statewide, national, and international impact.

Applications open now (through April 20<sup>th</sup>, 2015).

And of course there are already vibrant Foothill/Stanford collaborations and connections for us to build on. For example, Foothill Psychology Prof Eta Lin has successfully pioneered internships and research collaborations between Foothill and Stanford ever since her arrival on our campus. Likewise the Foothill Center for a Sustainable Future was launched five years ago with keynote addresses from Stanford's legendary Design School founder David Kelly – with our own President and Board of Trustees members in attendance, and with follow-up tours of the d-school for our students and faculty and staff personally led by Professor Kelly himself. In fact our first (and alas last) Earth Justice Day 2012 was another cardinal example of collaboration, with Stanford's Human Rights Education Initiative providing funding, logistical and research support, and nationwide publicity for the event.

Yet opportunities to collaborate with everyone from star profs to ordinary undergrads at Stanford is an oft-overlooked opportunity.

So let's see some EPIC applications this year too! This latest Stanford grant is tailor-made for building a far more permanent bridge between our two campuses – with Climate-Change-across-the-Curriculum as the centerpiece of a Foothill/Stanford partnership capable of making some waves far beyond the confines of Silicon Valley.

Think globally. Apply locally.

**Week 7: March 1, 2015**

## [Foothill's Campus: An \(Accidental?\) Climate Change Teaching Tool?](#)

I couldn't possibly end this 7x7 teaching-and-learning blog without mentioning my own ongoing sabbatical research concerning *Earth's Largest Lakes and the Battle to Save Them*. Could I?

Well, kinda.

Because instead talking about earth's largest lakes here, I'd prefer to talk about two of our largest bodies-of-water right here at Foothill College: the artificial pond in front of our BioHealth Division office, and the huge ornamental fountain that greets all of us daily at the entrance to our beloved and beautiful campus.

Based upon my own sabbatical research, I've (re)discovered one simple truth: the greatest threats facing earth's largest bodies of fresh water—from Lake Superior to Lake Baikal to Lake Titicaca in South America, Lake Tanganyika in Africa, Lake Geneva in Western Europe, Lake Eyre in Australia, and even Lake Vostok beneath the Antarctic icecap—are eerily similar to the threat facing those little artificial ponds we build in our own backyard. Perhaps even virtually identical.

Those forces include human-induced eutrophication/algal blooms, invasive species, climate-change-driven catastrophic drought, warming waters, globalized airborne pollutants, and the blindness and denial of local officials. Including our own.



Let's take the new BioHealth Ornamental Pond as one example. Built to replace one of Foothill College's most beautiful ornamental gardens ever (a graceful pond and marsh ecosystem crafted by our very own Ornamental Horticulture program decades ago) our Measure E monies ripped out that those lovely riparian plantings (for trumped up "safety" reasons)

and replaced them with a very large, very ugly concrete bathtub. To make matters worse, that Big Bio Bathtub is currently choked with gross green Algal Blooms that grow like huge green slimy malodorous mats in the increasingly fetid water. This, in turn, is at least somewhat similar to a larger process lake scientists label “eutrophication,” wherein waters overcharged with manmade pollutants such as phosphorous and nitrogen – much of which falls from the air from as far away as China here in California – chokes the life out of huge lakes beneath quite similar green slimy masses.

Alas vast areas of eutrophication in evidence in lakes worldwide—including earth’s largest bodies of fresh water—witness, for example, the toxic algal bloom that shut down all of Toledo, Ohio’s municipal water system bordering Lake Erie for several weeks’ last summer. Or the vast and frighteningly-sudden eutrophication choking the Caspian Sea (pictured left)-- one of the Earth's largest bodies of water.



Foothill’s BioHealth’s “Big Green Bathtub” is thus an eloquent—if accidental—campus-based teaching tool for exploring the accidental yet ugly effects of shortsighted planning worldwide.

Similarly, there’s the huge new ornamental fountain built right at the entrance to our campus to (re)consider: say what you will about its beauty, or lack thereof, that fountain continues to trumpet its message of blissful disregard for California’s catastrophic drought to each and every student who enters the campus. Three years into a climate-change-driven drought that has left much of California agriculture in near state-of-collapse (and with our current snowpack in the Sierra at 25% of normal) campus officials explain that the fountain only uses “well water” drawn directly from underwater aquifers (and therefore not fed by Sierra snowpack or even local rainfall precipitation).



What they fail to explain is that water tables under Silicon Valley continue to decline drastically due to catastrophic over-pumping—just as they do in the Central Valley.

Here on campus this will lead (among other things) to what will likely be permanent and irreversible damage to local creeks and riparian environments—including our own once-lovely, now increasingly desiccated Adobe Creek. In short we are unconsciously replacing an irreplaceable and beautiful natural creek environment with another concrete pond (drawn from fossil water we all may need for drinking water



someday, especially as the current catastrophic drought in California shows absolutely no signs of abating anytime soon).

What does Foothill’s entrance fountain have to do with some of the earth’s most enormous lakes? More than meets the eye, alas. Globally, once-vast lakes such as the Aral Sea (inadvertently drained and destroyed by Soviet bureaucrats), and Africa’s Lake Chad (soon to disappear from maps of Africa completely) are being sucked dry by water diversions, water table collapse, and epic drought in the sub-Saharan regions of northwest Africa).

Hence for purposes of teaching-and-learning about climate change, I propose installing large plaques next to each of Foothill’s two largest water features.

The first, facing the BioHealth Division office at the edge of the Big Bio Bathtub, would read “Holy Toledo Ornamental Pond: a Teaching-and-Learning Tool Illustrating the

Global Perils of Eutrophication, Oxygen Deserts, and Human Folly.”



The second, installed to greet everyone entering Foothill College, would read “Foothill College Climate Change Denial Memorial Fountain” – with out newly-commissioned plastic statue of our college mascot, Oxy-the-Ostrich, hiding his head beneath the surface in

mock shame.

Then—to end this blog on a more positive note!—we can finish plans to use our huge solar array on the far side of the campus (still the largest in the South Bay) into our teaching/learning environment on campus too. Ideally, it will function both as a daily direct lesson in the economics of alternative energy and—with the right data monitors installed in each campus building—a tool for teaching how to manage our campus energy resources far, far more efficiently than we manage our fountains.

That's one Foothill Feature we can all be proud of—a clear signal that Climate Change across the Curriculum has already begun!





**Week 1:** January 21, 2015

**Well Hello...**

This is not only my first blog EVER but my first post. I feel I am evolving into the new millennium. How about those educational apples! I recently attended a professional development workshop offered to all employees at Foothill. This is just one of several benefits of working at Foothill, being supported by management to grow professionally. This day we had a student panel featuring some extremely inspirational, bright, motivated young women and men. They shared their struggles educationally and personally in trying to complete their goal. In listening to them I found myself in awe of what they have overcome and still struggle with currently. They became hero's not just students needing direction or assistance. Reality live and in color. Working in education to me is one of the most important interactions you can have with someone. All ages, colors, economic levels come under one roof to do the same thing...make a change in their lives. I get to see eyes change from worry, intimidation, confusion to eyes at ease, confident and clear. Watching and listening to our students and alumni reminded me just how important it is to be mindful of every encounter I have with anyone on campus. This is what has made reality TV so big. The human side of human beings. The background story we all have behind our everyday smiles. So, a new year, a new blog, a new approach on everything has me a very busy girl :)

**Week 2:** January 26, 2015

**Measles Outbreak.....Do you care?**

Let me start out by saying that I hope to never offend anyone with my own personal feelings and views. So please receive my feelings with a grain of salt. Measles are here in California and spreading at an alarming rate. Many are attributing the spread of

the disease to parents not vaccinating their children during their “first five” years. I was one who felt opposed to subjecting my daughter to the shot of “mystery goo” that was supposed to protect her from life threatening diseases although many studies have linked autism and death to this shot. I was young and fell under the pressure from her school so I went against my judgement and offered her up to the shot. I am happy to say nothing happened in result to this decision however I have read several stories of parents who were not so lucky. So here we are years later and an outbreak has come to exist in our backyard. Beyond your personal stance on vaccinations or even the “flu shot” we as educators are on the front line along with many many other jobs that require heavy public contact. When do we become worried or nervous when that person next to you sneezes? I am not forming a blame game because according to reports there were people who were indeed vaccinated and still got infected. I guess what I am saying borderline blathering is... ” Why is this not being communicated more openly to people who work with the public?” Why does the media waste time trying to research and blame people for their right to choose whether or not to vaccinate? Why not encourage people to stay vigilant on how it spreads, exactly where the hot spots are or better ways to prevent spreading. There is information out there however I don’t feel the information is being put out enough especially to front line public workers. Enough said, How do you feel?

**Week 0:** January 8, 2015

First Day



I should have known when I got to my classroom on Monday that something wouldn't go well. I opened the door for students I had never met before and walked into a strange, dark classroom with no light switches on the wall. The lights came on by themselves if you entered the room far enough. I turned on the control panel at the teacher's station, but nothing worked even though all the buttons lit up: no document camera, projector, or computer. Now what? Have I become so dependent on technology that when it fails me, I fail at teaching? How can that be?

I remember the days with chalk and blackboards and when TVs had to be delivered to the classrooms after they had been reserved. Overhead projectors were not in every classroom. And yet, as I stood before the class and welcomed the students, my mind was racing ahead in trying to figure out how I was going to conduct the class without my Prezi presentations or without being able to show the students the syllabus by projecting it on the screen. It was a grammar class, and I usually start the diagnostic test by showing a couple of the items on the screen.

In fact, I started to realize that I use the document camera and the computer all the time in class. Luckily I had handouts prepared. I also remembered that if we call TECH, we might be able to get someone out to the classroom to fix the situation.

Still, this got me thinking about my dependence on technology (and might I add, dependence on the technology I know – what happens when you only use Apple computers and the classroom has a PC?) I first thought it was like performing without

the expected props, but now I think it is more like performing without a major character on the stage.

Technology is supposed to aid teaching, and yet the lack of it hampers teaching. Perhaps the same could have been said when textbooks were first introduced. What would teachers have done if they had forgotten their textbooks? In any case, I knew that the technology problem would be solved, I had hard copies of work sheets, diagnostics, and the syllabus, and the students had paper and pens. And my brain was still functioning.

**Week 1: January 17, 2015**

### [The Freedom Country](#)

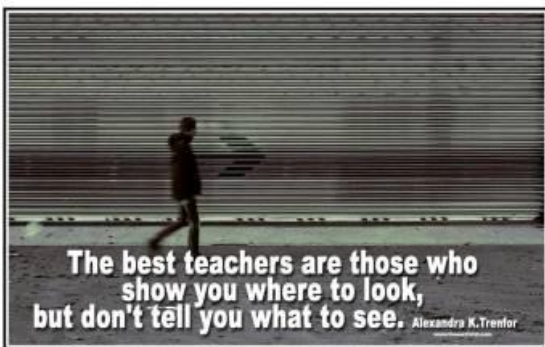


I have noticed that international students refer to the U.S. as “freedom country,” not a free country. Often they have created a picture in their heads based on the Hollywood films they have seen. There is a certain mixture of sadness and hope, especially if they have just arrived. In constructing conditional sentences, many ESL students write, “If I had been born in the U.S., my life would have been better.” This is especially true for Chinese students. And yet, I question whether I am setting up my students for failure. Failure here if they come to believe that they can say or do whatever they want without consequences. “Can we really say anything we want because of Freedom of Speech?” Failure at home when they go back to societies, where they may no longer fit in. Teaching language is also teaching culture. The cultural content given in textbooks (even grammar books), the articles and pictures I choose to present in class, and the films and film clips I show in class are all from a personal perspective and contribute to the impression that the students develop of American culture. I have become

hypersensitive to this fact, and yet I may not always be aware of the impact such decisions have.

**Week 2: January 24, 2015**

### [On second thought...](#)



When I saw this picture with the definition of the best teachers on Facebook, I first agreed with it. “Yes, that’s the best teacher.” But the more I thought about it, the more I realized that I am not that type of teacher. If I am honest with myself, I have to admit that I show my students where to look and also what to see. Let me explain. This week I was

teaching the use of adjectives that are formed from verbs using either –ing or –ed endings. ESL students get the two adjectives mixed up all the time, so I might hear, “Mr. Morasci, I’m interesting in reading more short stories,” when they mean “interested.” Other teachers must have also heard such errors by ESL speakers, some causing smiles. “I’m boring.” “I’m amazing.” Notice the similarity of pronunciation of “interesting” and “interested in.”

I show a short video, which has two purposes: it gives the students a chance to practice the two types of adjectives in describing what happens in the video. What is frightening? Who is frightened? They are to write a summary of the video. The second purpose, and this goes back to the definition at the beginning of this blog, is to try to get the students to focus on where they are in the here and now. They have the opportunity of being at Foothill College, which allows them to prepare themselves for the future in whichever direction they would like to go. I want them to think about this unique situation that they are in. I want them to focus on parts of the world, where a college education is not possible. I want them to cherish their present experience here. That is what I want them

to see. I find out what the students think through the second part of the writing assignment that asks them to explain what the video means. And I can assure them that they will never look at a 10-minute period of time in the same way again. Here is the video if you are interested:

<https://www.youtube.com/watch?v=Za8-THNtk-M>

**Week 3: February 1, 2015**

### [The pain of reading...](#)



Horace Mann was supposed to have once said, “A house without books is like a room without windows.” But I wonder whether that is true anymore. What with all the “windows to the world” that people carry around with them nowadays, are books moving towards the trash heap of history?

Once in a grammar class, I was teaching the use of infinitives, and we had this template that students were to fill in: “When I am on vacation, I have more time \_\_\_\_\_.” When the students were discussing what they had written, one student had written, “When I am on vacation, I have more time to *read* books.” Another student immediately commented, “Why work on your vacation?”

Many ESL students haven’t read a lot in their first languages, so “the joy of reading” hasn’t been established or so it seems. In a high-intermediate reading class just this quarter, students interviewed each other about their reading habits, and one question asked if the students knew what “the joy or pleasure of reading” was. Few students had a clue. Given the task of reading in a second language, ESL students seem to approach every reading assignment as if I were asking them to do heavy lifting. They understand that they will be required to read much more in their content classes than

we require in lower level ESL classes, but I get the feeling that when they finally finish their studies, they will never pick up another book to read.

So what is the solution in the little time I have with my ESL students? According to the short video, *A Vision of Students Today*

<https://www.youtube.com/watch?v=dGCJ46vyR9o>

students read on average 2300 webpages and 1281 Facebook profiles per year and write 500 pages of emails per semester. Students are obviously interested in reading text message after text message. How do you transfer that interest to the reading of books?

In lower level ESL classes, high-interest readings are assigned: short biographies of famous people (Tony Hawk, Mother Teresa and people from the students' home countries), articles on the funny/embarrassing aspects of learning English (stories that mix up *sheet/shit*, *piece/piss*, *bomb/bum*), and readings on family, relationships, multiculturalism in the U.S. (Amish), and other topics chosen by textbook writers. However, one definition of the joy of reading is that it is an experience where you can't put down the book. And you want more time to read. I want students to find books that fit into this category. The textbooks provide ideas but not the joy of reading.

Our library has a 10-level ESL section and a Multicultural Workshop Box containing 3 levels of many short, topical articles. Students can freely choose the books and articles based on their interests. I always recommend that they check out three books or three articles at a time. This reading assignment should not be work, so if a student finds out that an article or book is not as fascinating as s/he thought, the book or article can be put aside because there are two other choices waiting for the student. Also, the following week the students come back to class and make recommendations of the readings they have done. If students can find that one book or article that they can't stop reading, perhaps a positive association might be created. Students will still be assigned readings they don't want to do, but they may learn that not all reading is work.



**Week 4: February 9, 2015**

### Traffic Jam



I carry these color folders back and forth with me from my office to my home and then back again to my office. They are filled with papers, quizes, exercises that I haven't gotten around to looking at. There is always the intention of reading them, correcting them, and grading them. The stacks continue to grow as more and more work is turned in. I walked into the division office the other day and showed another teacher my bag of papers, and she said, "Oh, so I'm not the only one."

Is this a wide-spread problem, or am I in a tiny, little minority of procrastinators? What is it about keeping up with the workload outside the classroom? I always seem to be behind the minute the first, second, and third assignments are handed in. My intentions are always good, but that sounds like the students who don't get their assignments done on time. (And we also know where the path paved with good intentions leads.) In addition, what kind of a role model is it for students when they see their papers are not returned in a timely fashion? "What was the big deal about having to turn them in by a certain date if the teacher doesn't get around to looking at them?"

A colleague casually said, "Why don't you give assignments that you look forward to reading?" In the best of all possible worlds, this would be ideal. The classes I am teaching now are 3 and 4 levels below English 1A. The students are still learning the fundamentals of English sentence structure. They are learning to write correct yet complex sentences. Many of the assignments are quite basic.

In teaching to write adjective clauses, I'll show certain scenes from *Groundhog Day* and ask the students to summarize the scenes and include who the different characters are. They can explain that easily using adjective clauses. "Phil Connors is the guy who is



living Groundhog Day over and over.” Not exactly earth shaking. But such simple exercises lead to better writing, or so it is hoped.

I have asked myself whether the amount of homework I give is excessive, considering that I cannot keep up with it. Part of me thinks that mechanical exercises in the book teach form but not usage. I try to make outside assignments reflect the world of writing. I want the students to be able to incorporate adjective clauses, for example, into their regular writing on campus in all their classes. I could go on, but continuing to write here will not make the pile of papers any less. It’s back to the stacks.

## **Week 5: February 16, 2015**

### **Dilemma**



I had never seen this picture before. Normally you see pictures of people behind barbed wire with the look of horror or resignation on their faces as you would expect at a concentration camp. This picture, in contrast, shows triumph. They survived the nightmare of the camps. January 27th marked the 70th Anniversary of the liberation of Auschwitz.

I visited the camp in 1972 and was disturbed by how well preserved the buildings and “facilities” were. It was as if a freight train could have pulled up at that moment and unloaded its cargo of human beings. The entrance behind the “Arbeit Macht Frei” sign actually reminded me of the entrances to many German youth hostels I stayed at with flower beds in bloom and a little decorative sign directing visitors to the showers. On January 27th of this year, I watched live coverage on German TV of the official ceremony where many survivors spoke to an audience of world leaders. However, I have also read that 52% of the world doesn’t know about Auschwitz. Does it matter?

The knowledge about Auschwitz didn't prevent the massacres in Cambodia or Srebrenica or Rwanda or now in Syria/Iraq. And the next massacre will not necessarily be like Auschwitz with trains and gas chambers. Still, I feel compelled to expose my ESL class to one of the greatest human tragedies in recent history. Is there a place for Auschwitz in the ESL classroom? In an ESL grammar class? If Santayana is right when he says, "Those who cannot remember the past are condemned to repeat it," then aren't I under an obligation to make sure my students are aware of what human beings have been capable of doing to each other?

I have asked colleagues about this, and no one has told me not to do it, but there haven't been many suggestions either. A friend said, "I'm sure that you will be able to somehow weave the topic into your classes." Another friend suggested that I ask students to think about major events in their countries that caused many people to die as a way of getting students to start thinking about genocide, war, famine, etc.

The Chinese may think of Nanking, the Japanese Hiroshima, the Ukrainians Stalin, the Vietnamese the Americans, and the Russians the Germans. Another part to this dilemma is that I have two German students in my classes. My purpose in showing Auschwitz is not to show what Germans can do, but what human beings can do, but will this be understood?

I lived in Germany for 11 years, and if there ever were a country that dealt in a meaningful way with its recent past, it is Germany. And yet, young Germans to this day are called Nazis by foreigners when they are angry at them. Look at the Greeks and their recent caricatures of Angela Merkel as Hitler. This has left me very unsure, and I am still pondering whether I should pursue this or not. If yes, how?

I'm thinking here of film. Not the documentaries. Every November 11th, I try to explain why we have a holiday on this particular day. I show scenes from the film, *All Quiet on the Western Front*. It is horrific. We usually are studying adjective clauses, so students can write about what the soldiers had to do *when poison gas was dropped on them*, or what they did *when they found rats in their trenches*. The students can use the structures we are studying while watching the film. But the main point here is to show

that the holiday was to commemorate the end of the First World War, the “war to end all wars.” This war was such a terrible war that no war was supposed to ever follow it.

With this in mind, perhaps I could use a feature film that dealt with the concentration camps. Again, students can use the structures we are studying to write about what they see in the film. Maybe *Playing for Time*. Maybe. But it has to be clear that I am bringing this topic into the classroom on the 70th anniversary of the liberation of Auschwitz so that these students are not part of the 52% of the world that has never heard of Auschwitz.

**Week 6: February 22, 2015**

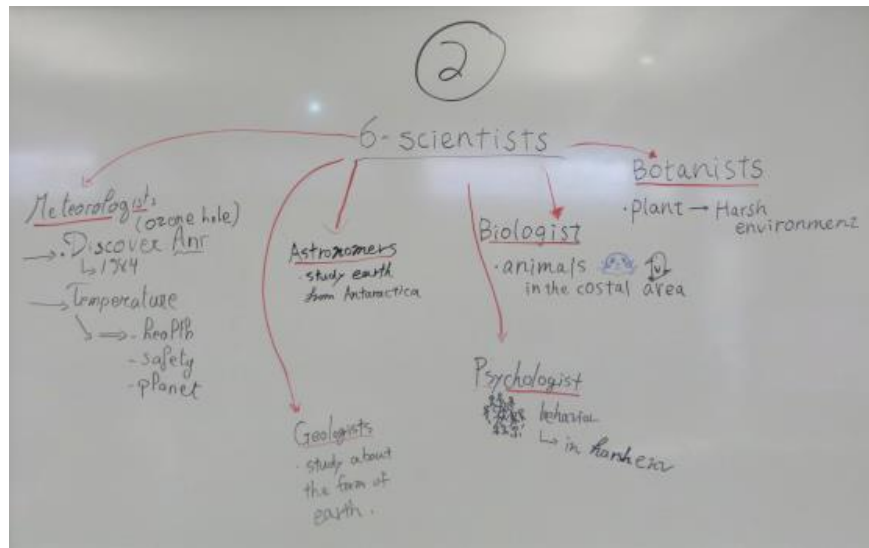
### [Students Teaching Students 101](#)



While I have been reading these reflective blog postings, I have been thinking about whether ESL students at the high-intermediate level could also collaborate with each other in presenting a reading to the class. I had tried it once before, and it seemed to me that it didn't work very well. On the other hand, I have observed an English 1A class, where students had to work in groups in breaking

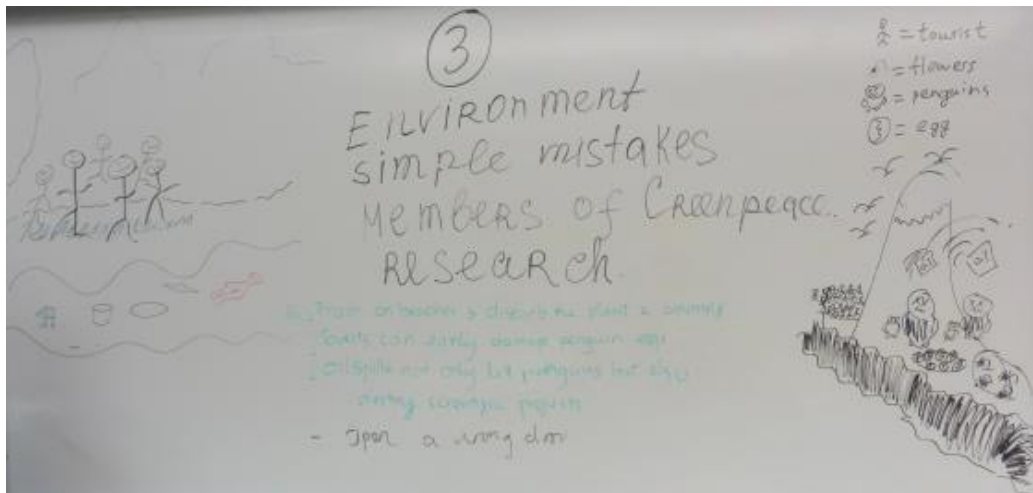
down a chapter to a book in order to present it on the white board to the rest of the class. Each student in the group had to help present the information, ESL or no ESL. They all did well. Why not help prepare my ESL students for this future English 1A class and have them do something similar? And at the same time, they may benefit from this activity even if their English is only high-intermediate. I was thinking about what my ESL students could work on in groups. The reading we were working on from the textbook was on Ecotourism, and in particular, the conflict between scientists and tourists on Antarctica. Instead of a chapter, individual groups could work on a single paragraph of the reading in order to present it on the white board to the class. Each paragraph

contained detailed information. The students could use key words, drawings, numbers, arrows, etc. in their presentations. Each member of the group would also have to present some of the information to the rest of the class. First, groups comprised of four students worked together with the text and a single sheet of paper. They could draft their white board presentation on the paper. Students became quite taken with the task of choosing the most important information from the paragraph, and they had to discuss with each other to decide which information to include. When finished with the first step, groups would then work at the white board, create the visuals, and divide up the material for presentation.



The presentations were conducted as if we were in a museum, and we moved from white board to white board. I was very impressed with the visuals, the way the students divided up the material for presentation, and the allowance for strong students to present more complex information and the weaker students to present “easier” information. What most impressed me was the little time I had to spend with them on preparing and giving the presentations. It was all student-centered and student-directed. Why has it taken me so long to bring into the classroom such a simple and successful activity? Maybe I didn’t believe students at this level were capable of pulling it off? Or perhaps it is the handing over of the reins to the class, which has prevented me from doing this more often. Be that as it may, it seems to me that ESL students get

much more out of activities like these than mere pair-work or regular class work, and I plan to do even more activities of this kind in the future.



**Week 7: March 1, 2015**

### Teaching Students to Lie?



On my green sheet, it states that students can have two unexcused absences. All other excuses must be based on real circumstances preventing the student from coming to class: illness, injury, family emergencies, etc.

I recently received two emails from students explaining their absences. The first one explained that since it was Chinese New Year, he had to stay home to call his parents, and they were only available during the time he would be in my class. (Half the class is Chinese, and I suspect will also celebrate Chinese New Year, but none of them missed class.) I wrote to the student, told him about the other Chinese students, and said that this was not a valid reason for missing class. The second email came with the

excuse that the student had to study for a Chemistry midterm, and therefore, he would have to skip both of my classes. I wrote back that ESL was supposed to help him pass Chemistry since he had to read the book and the tests as well as understand the lectures. I also told him it was not a valid excuse.

Now here is the problem. If both students had written that they were sick, they would have been excused. Perhaps there were other students who were absent around the same time but had written me that they were ill. Maybe they were ill and maybe they weren't. How long is it going to take my two honest students with lame excuses to find out that if they had told me a lie (that they were sick), they would have been excused? In effect, aren't I teaching the students to tell me lies and not tell me the truth?

However, is it possible that the two honest excuses were really valid excuses? A colleague thought the story of calling one's parents on Chinese New Year was actually quite nice. I haven't asked anyone about the Chem midterm excuse. I understand how students have to set priorities, and family and a Chem midterm were more important to the two students than the class. Perhaps the problem is more with me. As long as students are doing the work, getting good grades, and finding out what was done in class when s/he was absent, shouldn't that be enough for me?

Here's the dilemma. It IS a face-to-face class. It DOES make a difference if a student is in class or not. Part of the class is community building since students slowly get to know each other and trust each other. The question that isn't asked on the first day of class can be asked in six weeks because of the trust among the students that has been established. The feeling that a student will be laughed at for his/her accent, grammar, or question gradually fades as students get to know and like each other. They are not afraid of speaking in front of newly-made friends. If a student can justify missing class for Chinese New Year or a Chem midterm, aren't there even more "valid" excuses for students to miss class for? Isn't this the proverbial slippery slope?

**Week 1:** December 19, 2014

### Friction

On professional development leave this year, being a student. Good experience, and not always in a good way. (“Mind if I vape here?”) Every teacher should be a student periodically. Shoe on the other foot, right? Realigns perspective.

This post is about some minor difficulties I’ve seen from the student side. Individually, most are insignificant. Many take seconds to deal with, few more than minutes. Some demand flexibility. But I’ve seen soooo many of them. Collectively, they’re friction. Slows you down. Or worse, wears you out. It’s making me reconsider how I structure my classes. A new laptop and home printer would make most of it go away for me. I’m thinking of students without that option.

Where to start? How about this: one login, people. These are face-to-face classes.

Course management system requires login credentials (student ID and password, apply at the registrar’s office). Class discussion and collaboration forums require separate login credentials (apply on the CMS subcontractor’s website). Math department computers require separate login credentials (apply at the department office). Printing privileges require separate login credentials (apply at the library). Actual printing requires separate login credentials (self-assigned, required to release document to print queue, then reentered at the print release station, and don’t screw it up). Use unique and secure passwords. Only takes a few seconds...

Media center people just scan your student ID and unlock the computer for you. Can we please do more of that, technology master planners?

Here’s another: required software and hardware.

For my statistics classes, I need two software packages, proprietary SPSS and open-source R. My laptop (Apple) runs R, but not SPSS. Media center computers (Apple and

PC) run SPSS, but not R. Math department computers (PC) run both, but lab hours are limited. The six-year-old Apple machine in my Foothill office ran R, but not SPSS, and no operating system upgrade would help. District did a hardware upgrade for me, so that machine runs both. That machine's at Foothill. That's more than a few minutes...

So adapt. I worked from a thumb drive (compared to a laptop hard drive, input and output only take a few seconds longer...), took screen shots of statistical output, composed the narratives in a text editor, then did assembly at home. But no revising a home-assembled document, nor assembling a new one, on any other machine. Poor old laptop can't read it, even with "compatibility" save options.

Here's a good one: some PC text editors don't recognize the carriage return character from some Apple text editors. Open a nine-page document sometime to see a single line of text. One loooooong line. Work on something else for now...

Ever use someone else's computer? Keyboard's in a different place, no familiar shortcut keys, none of your bookmarks, mouse feels different, scrolling varies. Autocorrect? Fuhgeddaboutit. So change the settings, only takes a minute... Learn to do it on any computer. Use a different computer every time you work.

Some instructors post course materials on the department website. No login required, hooray! Also not bookmarked anywhere, so just type "<http://math.sjsu.edu/~instructorname&#8221>; and hit "return." Just takes a couple seconds...

At crunch time this semester, putting finishing touches on two group projects due the same day, I needed SPSS for the noon class, R for the 6PM class. On campus, R is only available in the mornings. You can't make this stuff up.

A paper I submitted in one class did not reflect the quality of work that I actually did. It's what I could push through the friction. Makes me reconsider what I ask of students and what I infer from what they turn in. After all, the university provides me all the resources I need to be successful...



**Week 2: January 19, 2015**

## Type II

Picked up “The Collapse of Western Civilization” last week, sci-fi by Naomi Oreskes and Erik M. Conway, historians of science at Harvard and Caltech, respectively. It’s a three-centuries-removed historical analysis of the Great Collapse of 2093. How could such a human-generated climate calamity happen when the so-called Children of the Enlightenment knew exactly what was going on? The “historians” pointed to market fundamentalism, which I anticipated, and statistical significance, which came as a surprise. From the book:

“Western scientists built an intellectual culture based on the premise that it was worse to fool oneself into believing in something that did not exist than not to believe in something that did. Scientists referred to these positions, respectively, as ‘type I’ and ‘type II’ errors, and designed protocols to avoid type I errors at almost all costs. [...] The irony of these beliefs need not be dwelt on; scientists missed the most important opportunity in human history, and the costs that ensued were very nearly ‘all costs.’”

Love the “future historian” device. Well, scientists didn’t design the statistical protocols, statisticians did, and still argue about them. But we also still teach them in stats classes, and scientists (including climate scientists) use them routinely. I teach stats, type I & type II errors, the whole bit. Not feelin’ too good about it at the moment...

In every stats class, some student will ask, “Why is the confidence limit always 95%?” I’ve always responded that when Fisher developed these procedures in the 1920s, he chose 95%, and everybody went with it. There’s never been a mathematical basis for it. Oreskes and Conway again, looking back from 2393:

“Given what we now know [blah blah nonlinear blah stochastic blah blah blah], the then-dominant notion of a 95% confidence limit seems hard to fathom. [...] We have come to understand the 95% confidence limit as a social convention rooted in scientists’ desire to demonstrate their disciplinary severity.”

So. I teach a social convention that'll drive civilization right off the cliff. Nice to know you're making a contribution, know what I mean? Just a little shove...

The problem I see is *routine*, i.e., *mindless* use of established procedures, and I can work with that. Thoughtfully consider the consequences of each type of error, then decide what standard of evidence you'll find convincing.

Think of the little kid with a maybe-monster under her bed. Mom sees the kid making a type I error – concluding there's a monster under the bed when there isn't – and sees the consequences: frightened child, interrupted sleep, potential psychological damage, etc. But the kid wants at all costs to avoid a type II error – concluding that there is no monster when in fact there is – because she'll be eaten alive.

Same thing with climate science. Arguably the most consequential question facing my students' generation (a little gift from mine) is whether human-generated climate change will render the earth inhospitable to civilization. Concluding that climate change really is that bad leaves us open to the unnecessary disruption and hardship of a type I error. But concluding that climate change is not that bad leaves us with business as usual if we're right, or the end of civilization as the consequence of a type II error. Eaten alive, you might say. Mindlessly applying standard statistical protocols to climate science minimizes the chance of a type I error. Kinda glad I won't be around to see how that one goes down...

So what am I doing to my students? Anyone questioning a routinely-used social convention is going to run into stiff resistance. Still not feelin' too good about it...

**Week 3: February 1, 2015**

### [Profit Centers](#)

\$326: retail price of the current (6th) edition of a textbook I often use.

\$22: retail price of the 5th edition, available through a half-dozen online sites. Add \$4 for shipping.

\$1: retail price of the 4th edition, also available online. Also add \$4 shipping.

Biggest difference in the editions? Exercises shuffled and renumbered.

The textbook market is a textbook example of market malfunction. Instructors make the purchasing decisions, but students pay for the product. Producers can't get, nor consumers send, clear price signals. Publishers only make money selling new books, hence the "new edition cycle," the three-to-five year period when publishers' profits decline steadily because of competition with used books, leading to a "new edition" to rejuvenate the revenue stream and protect shareholder interests. But there is now a worldwide market for used textbooks. I can't in good conscience ask students to spend \$326 for a product they can get for \$5.

Two publisher's representatives dropped by my office recently, uninvited and unannounced. I like to spend a minute with them, for their fresh perspective on students, as profit centers. I told them their new edition is not a better book than their old edition, and asked if they had been getting a lot of complaints from students about the shortcomings of their old edition. I suppose I should have listened to what they had to say...

Came across "Silicon Valley Turns Its Eye to Education" in the Times business section. Startups are working the "freemium" model: provide an app free to teachers and students (for attendance, homework reminders, progress reporting, locating resources, etc.), build a user base, find a way to monetize the traffic, and attract investors. No one seems to have hit on the right business model yet, but every model views students as profit centers.

That view just rubs my fur backwards. I prefer to think of students as learners. Learning is difficult; it requires change. When it really happens, it's transformative. That's what I see as my job, to create opportunities for transformative learning experiences. To have even a tiny chance of success, I have to earn students' trust. No one is going to take the

necessary risks at my urging without a bedrock trust that I'm completely on their side, that I am acting solely in their interests. That to me is the heart of a student-teacher relationship. In my experience, it's the key to student success, far more predictive than even intelligence.

That's the problem I have with bringing a business model into my classroom, be it through the new edition of a textbook, a fee-based app or any other monetized way: investors have their own interests. And, since I run the show in my classroom, students accurately impute those interests to me. I'm no longer working completely in their interest, and so forfeit some claim to their trust, and so lose the tiny chance I had to create a transformative experience.

But it's worse than even that. Modeling the student-as-profit-center begs the question, what do students get in exchange? A credential, right? You might even say a student is *entitled* to a credential, like they'd buy a concert ticket, because of the business interests they served in their role as a student. Forget learning. Forget transformation. Completing the course with the desired grade becomes the entire point of the experience.

Student-as-profit-center undermines student-as-learner. I'm kind of done with that model.

**Week 4: February 9, 2015**

### [What Not To Do](#)

Professors are not teachers. Professors are discipline experts. (Kepler and Newton, world-class discipline experts, routinely lectured to near-empty university classrooms.) A teacher is a discipline expert with a knack for sharing their expertise with novices. The difference is the focus, evident in the job title. Professors profess, teachers teach. You can judge a professor by what the professor does. You can only judge a teacher by

what students do. You can't say anyone has taught anything unless you're sure someone has learned something. I taught my dog to whistle, right?

I don't blame professors for being lousy teachers. They're not rewarded and frequently penalized for trying to teach well, that is, trying to help students learn. Still, there's some craft to it, and at a very basic level, there are things that a professor might do that a teacher would not. These things not to do are close to my mind because I'm a student this year at California State University, observing professors when they're called on to share their discipline expertise with novices. I'm not making any of this up...

1. At the first class meeting, don't read your syllabus aloud.
2. At the first class meeting, don't ask, "Does anyone have a marker?"
3. At the first class meeting, don't say, "This class will require some interaction and discussion. If you don't like that sort of thing, don't come to class."
4. Don't put this note on your office door:

**STUDENTS: PLEASE DO NOT KNOCK WHEN THE DOOR IS CLOSED.** We are preparing for class, grading your papers, or conducting other university business. If you'd like to meet with Dr. A or Dr. B, please either sign up for office hours, or send an email to the appropriate professor.

**THANK YOU.**

5. Especially don't put that note on your door when you haven't responded to a ten-day-old email from a student.
6. Don't copy textbook sections onto powerpoint slides.
7. Don't read your powerpoint slides aloud.
8. Especially don't read your powerpoint slides aloud if you've copied textbook sections onto the slides.
9. Don't display a diagram with embedded abbreviations when you can't remember what's abbreviated because you "haven't taught this course for a couple of years."

10. One-third of the way through the scheduled classtime, don't say, "That's all I have for you today."

I could go on. Group activities are good teaching, right? Don't assign a group activity because you've heard you should assign more group activities. Don't assign a group activity that you haven't done yourself. Don't assign a group activity without a prompt, without instructions, to groups of "five or six." A group of six is two or three people working and three or four watching, by the way.

I think every teacher should be a student periodically, like every doctor should be a patient, every lawyer a defendant, every parent a kid for that matter. I'm lucky to have the chance, even if it's to see what not to do. I've enjoyed several cringe-inducing experiences, thinking, "I don't ever do that in the classroom, do I?" And then resolving, "OK, I'll never do that in the classroom." And "What Not To Do" is just the kindergarten-level teaching craft. If anyone's cracked the grad-school-level "What To Do" code, please share...

## **Week 5: February 16, 2015**

### [Type II Redux](#)

Every decision is subject to errors, right? We talked about this. So what type should they be?

Been working on the Common Assessment Initiative, one result of a new law aimed at improving student placement and reducing redundant testing statewide. A student applying to any community college in California will only take an assessment exam once (assessment). The results will be portable, so that any college can use the assessment results to determine where to place the student in the local curricular sequence (placement).

So the discussion got around to type I and type II errors. I'm all over it. In this context, deciding whether a student should be placed in either a college-level or a pre-collegiate course, a type I error arises when we place a student in a college-level course where they're unlikely to succeed. A type II error occurs when we place a student in a precollegiate course when in fact they would likely succeed in the college-level course.

Standard statistical techniques minimize the chance of a type I error, but I think we saw that a mindless adherence to those procedures will doom civilization. So I get to actually practice the lesson of two posts ago. We're building a new system here, so we get to be thoughtful about it. What are the consequences of each type of placement error?

A type I errors sets the bar too high. Students struggle with work that's over their head. Type II errors set the bar too low. Students struggle with disillusionment. If people really do rise or fall to expectations, a type II error is a disaster.

So what about the consequences in my classroom if we allocate all placement error to type I? I see enough students struggling with math. It doesn't help that 80% of the students walking into my classroom hate my subject. I see greater challenges for me as a teacher. How do I inspire people to reach deep and persevere in the face of difficulty? (That's a typical conversation I have with myself in the morning: "Whatcha gonna do today, hotshot?" "Be inspiring." "Yeah? Well, good luck with that.") Thing is, that's the challenge that inspires me. One reason I'm a teacher.

All right then. Bring on the type I errors...

**Week 6: February 23, 2015**

### [Alternative Explanations / Competing Narratives](#)

I recently heard a scientist describe science as a search for alternative explanations, and a historian describe history as a struggle among competing narratives. The

similarity struck me, and the applicability to math education came to mind as the math working group for the Common Assessment Initiative met last week.

We're trying to assess students' knowledge, skills, and abilities so that any college in the state can use the assessment to properly place students into their local curriculum. I'm not optimistic we'll do a good job, but we'll do what we can with the resources we have in the time allowed. The committee talked a lot about student success, and that's where the need for another narrative struck me.

Plenty research on student success. At the course level, the outcome is almost always defined as a passing grade. It turns out that by far (like, by FAR) the most powerful predictor of student success by that measure is the teacher of the course. This is not news. The dominant explanation in my field is that the teacher does not assess students abilities well, if at all, and simply records a high proportion of passing grades. That's the "lousy teacher" justification for high student success rates.

But there's at least one alternative explanation. What about teachers exceptionally skilled at identifying student abilities, in effect obtaining extraordinary results from ordinary people? Such a teacher will also record a high proportion of passing grades to reflect that positive identification of competence. That's the "exceptional teacher" justification for high student success rates.

During the assessment committee's discussion, I asked how we might distinguish the two. The immediate response (that felt dismissive to me, as though I were ignoring the obvious) was to look at students' performance in subsequent courses in a sequence: failing a subsequent course is solid validation of the former explanation. The teacher in the earlier course was way too easy, did not hold up standards, etc., etc.

That response has always bothered me, for inchoate reasons. For one, nearly every course in our curriculum is the last math course on some academic path, so that often, there is no subsequent course. But the "subsequent course success" validation metric is dominant in my field, and I was at a loss to respond. I think I can do better now. I think we need an alternative explanation. A competing narrative. And like every other



educational issue I've ever discussed in any depth with people, this one comes down to assessment.

What if teachers of the first course tend to give students opportunities to demonstrate competence that are both many and varied? And what if teachers of the second course tend to give fewer opportunities, with little if any variation? It's entirely conceivable that some students would succeed in the first course and fail subsequently. Why? Because teachers of the second course failed to identify success in demonstrably successful students.

I can't say that this explanation is any more or less common than the first. Undoubtedly they both apply in lots of cases. And there are at least a couple other explanations I can think of offhand. But I'd like to see this one gain traction as an alternative explanation, a competing narrative. In science, in history, or in any other field, competing narratives by their nature prompt reflection and improvement, right? What did Hegel say about it? Thesis, Antithesis, Prosthesis? (Sorry, old joke.) So here's a little antithesis, to stir things up. The result, we all hope, is greater student success...

## **Week 7: March 2, 2015**

### Care

Sat in on a colleague's class this week. One of the luxuries of being on leave. Teachers should do this regularly. Who's got the time? Well, I do, for now...

Community college arithmetic class. Thirty-some students tasked to distinguish one-half plus one-half from one-half times one-half, and to explain why neither one of them is two-fourths. Lots of interaction & struggle. I saw a student sketch a completely appropriate diagram but be unable to articulate the idea in his head. Watched others try to apply procedures mindlessly. Some of them were correct. But without an understanding of the quantitative ideas, and with unhelpful authorities in the room (my

colleague, his embedded peer tutor, and me), students could not be certain. I overheard comments, “No, it can’t be that,” and, “Just think about it for a second.” Plenty learning going on there. Fractions mean stuff...

How could this happen? How could thirty-some grownups put this much effort into mastering ideas they probably first came across in school when they were ten? Trust. I could feel it. They trusted my colleague not to ask them to do something that wasn’t worthwhile. And I could see why they trusted him. He cares about their success. Every action and interaction I witnessed proclaimed that their success was his first priority. And they knew it. At one point, as he was walking around the class, he asked me how I was doing. Thinking I was just blowing smoke at him, I asked in a voice just loud enough for the three nearby students to hear, “Why do you care so much?” He blew it right back, gesturing to encompass all the students, “Wouldn’t you?” Smiles from those nearby...

After class, with still a couple people hanging around, I asked him again. He said that he thought somebody’s education is worth caring about. But then he turned it around. Why is it surprising or unusual that a teacher really cares, and cares a lot, about student success? Shouldn’t we all?

Um, yea-ah... But we’re selected as content experts. Our “minimum qualifications” address content expertise only, any other qualities are merely “desirable.” How loud does that scream? How about this instead? Looking for a content expert with a knack for sharing that expertise with novices and a deep emotional investment in the success of those novices. Looking for a teacher.

**Week 1:** January 19, 2015

### [The first week—how to create your classroom culture](#)

Creating classroom culture is the first thing that I think about mastering when I'm about to meet a class for the first time. I think we first have to realize that we are just like our students (I am writing this post on the day of the deadline...not surprising). We have similar anxieties before the first day, and apprehension about ways in which we will be judged. I lose sleep over all of it the day before the first day of classes. Do you?

Once you are in the shoes of your students what do you see? I try and find ways to alter some their preconceived ideas and I try and make sure that their apprehensions are addressed. So the first thing I mention to my students are the anxieties I had before meeting them for the first time. I look at them, in the eyes, and tell them that I am human and I understand that they are too. I tell them about the crazy dreams I had before class; that I had the wrong room number or woke up late. Yes they laugh, but it also disarms their own worries. It at least shows them that they are not the only ones.

Teaching is a cultural experience and involves incredible human consideration (this is why the MOOCS have not made my job obsolete, in my opinion) and yet we sometime hide behind the podiums or put a large desk/table between the students and ourselves. This is the first thing I walk around to talk to the students. We are just like them, human, with fears and worries. I say express them and see what happens.

I am an extrovert. It's not hard to get extroverts to talk, discuss, answer questions, meet their neighbors etc... But how do you get the introverts to gain the same benefits as the extroverts in the "getting to know you" activities we do in the first week of classes? I might have a solution, well one that is working well so far. When my colleague Ion Georgiou died last April just days before Spring quarter I was one of three people who took a class he was scheduled to teach. It was hard to address that class for the first time but it was also a hard quarter for the entire math department. Our department

bonded together and I heard people around me talking about his character, how he dressed, how he walked and how he cheered us up over the years and I began to think....how would someone describe me when I die? So that first week of Spring last year I began my class with “If you were to die, how would people, friends, family describe you?” And the strangest thing happened; the introverts talked about how they were introverts. It was amazing! They said things like “They would describe me as shy but when you get to know me you’d see that I was funny and thoughtful, full of gifts and easily amused.” It was as if this activity disarmed everyone equally and allowed them to speak freely about themselves without seeming like they were bragging or boasting. At the end of the activity I talk about how the introverts need the extroverts and the extroverts need the introverts. I have done this activity a few more times and each time it seems to produce the same results—real awareness and a good classroom culture.

The second week of classes was WAY easier.

## **Week 2: January 26, 2015**

### **What its like to teach math to a blind student**

When I first heard I was going to have a blind woman in my class, I thought, oh, she’s probably just ‘legally’ blind right? She’ll be able to see most everything, it’ll just be really close to her face or she’ll need the exams in a 20-point font. Little did I know Marigold has been 100% blind since birth. She was a preemie baby and no more than 2 pounds at birth! She entered my room holding onto her mother’s arm dressed in a matching velour tracksuit with dark sunglasses covering her eyes. It was day 2 of class; she missed the first day because she didn’t see the room change sign and this was her first time on campus. Her mother was bent talking in a frustrated tone about “how was anyone blind supposed to see the room change sign”. I..., well, didn’t state the obvious and took it in my stride as most instructors do.

I sat down with Marigold as the class was slowly spilling in and her mother soon left the room. I was calm about it all and excited to meet this new student. She was very sweet and very understanding not only about her condition but about what I was about to learn having a blind student. She knew much more than I did what was about to happen. I introduced her to her classmates and her group (groups were formed the day before) and told them that they would have to read EVERYTHING out loud and explain what is going on since Marigold is blind. They were a compassionate bunch and dove right in. This is not to say that I didn't have to go back and remind them. "That thing you just did with your hands, Marigold can't see that. Could you try explaining that in words?" I would say, but they were at least willing, and I quickly realized that the awareness needed to be learned by all of us. Later in the quarter Marigold did have a DRC appointed aid that sat next to her in class everyday but her interactions with her group members were the most important in her learning. Her aid just helped facilitate them.

Marigold moved groups, as did everyone, every two weeks. Each new group needed to learn how to interact in a way that Marigold could understand what they were doing and learning. Many students felt they needed to explain graphs, diagrams and tables to her but it was hard for them and they soon realized it was good for them! When you are sighted and working in a group, you know how you glance over to see what another student has written? Well imagine if you couldn't do that. So I had the students read back their answers and, as you could guess, it made them stronger students. While much of their hand waving (literally) was good in terms of understanding slope of a line or the shape of a given distribution, what really needed to happen was for them to verbalize their understanding and in turn that improved their writing skills.

I had Marigold for two quarters in a row and for me it was the most difficult challenge I had ever been presented with in the classroom. Many will say that math is hard, and while I won't disagree, many books, instructors and scientists know that graphs and tables were invented to help us understand and "see" what is going on in a mathematical relationship. Marigold didn't have that advantage. When I organized a two-way table to help my students with conditional probabilities it was useless to her.

She had to organize the numbers in her head; far more challenging in my opinion but she was quite skilled at it. We came up with all different ways to “see” things. At one point I decided that dot plots were easily “seen”, or felt, in her case if I put a push pin through the back of each dot. I also scraped each bar of a histogram with that same pin. We just had to make it up until the workbooks were made in braille. Yes, if you thought math symbols are hard to read, check out a book in braille.

As you can imagine Marigold did extremely well and she worked very hard. She later went on to Ben Stefonik’s social science statistics class and did very well. She has now transferred to San Jose State and I am very proud of her, but not surprised. She is an amazing woman and she taught me so much.

\*FYI-Marigold is not her real name.

### **Week 3: February 1, 2015**

#### **OMG, I have a math exam tomorrow**

By just reading the title some of you may have sweaty palms and possibly experience flashes of images of past math trauma. This is normal. But just because the stress is normal does not mean it can’t be controlled, or at least reduced.

Let me give you an example from a girlfriend of mine. It’s not about a math exam but about raising her daughter. Here’s how her afternoon goes: “I’m in a line up of cars to pick up kids after school and I am worried about getting my daughter Lisa, home, fed, in her soccer uniform and out the door in exactly 78 minutes including the drive and waiting in this damn line. I was wishing I had gotten there earlier but the Starbucks barista messed up my order. Lisa saunters to the car. Can’t she walk faster than that? We don’t have all day to get to soccer you know. As soon as Lisa got into the car I began to tell her exactly what needed to happen in the next 78 minutes. ‘OK Lisa, I need you to focus. I need you to go upstairs as soon as we are home and get your

soccer uniform on, put your homework on your desk, don't forget about the assignment we were working on last night, and immediately come downstairs for some food. Then we need to march out the door at 5:15 to get you to practice on-time. I don't want you to be late so I need you to move it.' Lisa rolls her eyes and you know you are going to have to move her along. This stresses you out and the more Lisa fumbles around the more stress you get. It's almost as if she is doing it on purpose."

My girlfriend went to a therapist about how to improve her relationship with her daughter. As she described the story above the therapist said, "My god, I would be really stressed out if you were talking to me that way. Poor kid has no other coping mechanism other than to drag her feet and be a disappointment to you all the time."

Stress can make people shut down. In fact, the Stanford researcher Sian Ballock, talks about how the neurotransmitters in the brain shut down during stressful activities. We all know that an over abundance of stress on a math test can make people "blank out". Well it turns out they are not lying. According to Ballock's research, the brain loses its ability of estimation and its ability to reasonably order numbers. If you can reduce the stress then this part of the brain will function again. How do you do that?

My girlfriend's therapist told her to first calm herself down and try being really relaxed while still getting all the tasks achieved. If you want a relaxed kid, be a relaxed mom, at least appear to be a relaxed mom (fake it till you make it). The conversation would go like this: "Hi Lisa. How did your day go? You have soccer tonight but we have plenty of time before we need to be there. What would you like as a snack?" The therapist said, "Don't mention the stress, the worry, or the timing. She won't respond to that. Give her time to swing in the backyard alone. Mention to her that snack will be ready in a few minutes but that she could swing for a bit longer before coming in. Then ask her to do the tasks in a relaxed way with some timed warnings. Prep her that she should get her soccer uniform on in the next few minutes but give her the chance to decide when in those few minutes she will stop swinging and go get it on. You'll be surprised by the response when she feels in control." My girlfriend tried this approach. She hid all her anxieties from Lisa and still managed to get all the tasks done. Lisa now, is

much more capable of getting her tasks complete and she rolls her eyes only to her Dad now.

I thought about this approach with my students. They say they don't feel test anxiety like they used to and they can't figure out what I am doing to reduce that stress. The first step is recognizing that the stress is normal, and then reducing my OWN anxiety before their exam. I am aware that I set the mood of the classroom so if I am stressed for them, it will show and they will respond matching that stress. Modeling behavior you wish for is nothing new but what I didn't realize was how I had changed my statements and communication about the exams. It's not that the exams are worth less of their grade, but I don't say things like: "The exam is this week and it's really important that you all be prepared for it." or "This is a really important exam and I need you guys to put in some serious study time." Now, those things are true. It IS worth a lot of points, it IS important, and they DO need to study for it, but here's how I change the way I communicate it. It goes like this: "As you know we have an exam tomorrow. We have worked really hard already for this and I'd like to make sure we do just a bit more to fine tune our understanding. How do you feel? What do you think we need to go over before tomorrow? What would help you tonight during your study time? Would you like me to email the study guide to you? Or would you like a practice problem? You guys are going to do great by the way. I am totally not worried." Lying is not a crime if it gets your students to perform better on their exam. I had a class last year that was SO fearful of failing the course (and these thoughts came up each day) that I just said, "No one is going to fail. We are all getting through this together." That was a lie, and I would have failed anyone who was below a 70% at the end of the quarter, but you know what...my success rate in that class was 92% with one W. Sure I lied to them, someone failed, but if it works, why wouldn't you?

If you want relaxed students, be a relaxed teacher.

If you want them to be less concerned with points, than don't mention them all the time.

If you don't want them to fail, tell them they won't!



**Week 4: February 9, 2015**

### Light a fire - a true rant

Teachers are human. Teaching is a cultural experience. Your job is purposeful. Well you know what happens every once and awhile in a human purposeful cultural experience? Frustration. I realized I was working harder than my students were. That, to me, is the first sign that something is wrong; the balance is off. This is exactly what is happening in my Statway II class. They are getting hit with real college level math and not stepping up to the plate. I am trying to do everything I can to motivate them and spark that little intrinsic light, but then I get a sore throat. That's right, I get sick and my patience runs thin. I arrive at my 8am class on Tuesday and the complaints come rolling in. I had no more filter left and instead of sparking that intrinsic light, I lit a real obvious fire right there and then.

Sometimes you have to tell your students that you have nothing left to give. They need to stop and take a real good look at their study habits and make some tough choices. Choice one: you suck it up right now, do at least two hours of work on these homeworks in the next two days, show up on time to turn them in, and get the help you need in the meantime. Choice two: you quit now and I see you next quarter. And yes you have to sign up next quarter because you are not a quitter. You are going to finish this course. What choice would you like? That fire, so far, worked. Some students really made the right choice to try again next quarter at a more reasonable time (10am) and others got that fire lit and started doing a great amount of work.

Sure they usually see me calm, understanding and on their side, but my world is not always full of fun sparkly rainbows. I have a lot going on in my life that I set aside to get assignments graded in 24 hours. I write emails to them on the off day to give them a good idea of what to do that day. I am pulling my weight and when they don't pull there's AND I am sick....I light a fire.

Sometimes even well mannered, truly empathetic instructors lose it. Sometimes it even helps the students who thought everything was easy and would be handed to them on a plate. Sometimes they surprise themselves by doing some really hard work.

This week, their performance is exemplar! And three students brought me cough drops. Who knew...teaching is a human cultural and purposeful experience.

## **Week 5: February 16, 2015**

### **An Email Routine – what messaging is the most effective?**

In my work (and that of Nicole Gray and Jeff Anderson) at the Carnegie Foundation for the Advancement of Teaching, I have been crafting emails (and a routine for sending them) to help with persistence rates.

The routine is simple (remembering can be hard): when a student misses class email them right away. So after the first day of class I go to my portal and click on the students who missed the first day and email them. Here's what I want to say:

“You missed class today, I noticed. I could drop you. It's in my green sheet...oh yea, you didn't get the green sheet because you missed today. Did you know that statistically speaking, those students who miss class are more likely to fail the course?”

And then I ask myself, is this the right email to get my student to come to class on day 2? No. This is not a motivating email. Would it motivate you to come to class? How about this one: “I noticed you missed class. Do you know how important coming to class is? It's really important to your understanding and your grade.” This one eliminates the snarkiness, and is factual, but again I don't think it would motivate a student to come to class. In fact I think these emails do the opposite. They either show a lack of empathy from the instructor or give a great excuse for the student to never come back. And this is not the reason you wrote the email in the first place. You care, and you want your students to be successful and you took the time to not only notice but write to them!

Here is the email I came up with for absence #1:

“Hey April. I noticed you weren’t in class today. Is everything OK?”

Short and sweet. 99% of the time they write back explaining a bunch of different circumstances, none of which are important to my efforts but do they show up for class on day 2? Almost always!

Now, what about absence #2, 3, 4 and 5? Those emails need to increase in intensity once a level of trust is secured. They might go something like this:

#2 “Hey April, I noticed you missed class today. I hope everything is OK. Is there anything I can help you with?”

#3 “Hi April, your group missed you today. They said something happened with your car on 280. Sorry! I hope you weren’t stuck for long. We went over Lesson 3.1.1 and I assigned the homework at the end of the lesson. It’s due on Friday. See you Wednesday!”

#4 “Hi April, I am starting to worry about your attendance. What can we do to make this better? We went over Lesson 3.1.2 and I assigned the homework at the end of the lesson. It’s due on Friday. See you Friday?”

#5 “Hi April, I think you’ll agree that getting to class everyday is hard for you. Let’s brainstorm some ways to make this better. I really want you to stay in the class and succeed, but without you there the magic can’t occur. What do you think?”

#6...well at this point you might see them dropping but I hope not. It usually doesn’t take more than three emails and they start emailing me about how they are sorry they missed class and would like to know what they missed. Brilliant! And not only that, but they are showing up. In my classes of 30, I have at most 3 absent each day. Not bad for a math class.

Think about what messaging from an instructor would motivate you to come to class. Let me know if you have some good ones. The goal is to get the student back. If what you want is to insult, slam, or condemn your students, do it...then erase it and write a

more motivating email. It makes me feel better sometimes to do that, because I am just like you, frustrated when I can get my students to class.

## **Week 6: February 23, 2015**

### Sick

So I don't know about you, but my students and I have been sick for months. I got some horrible flu on Halloween and it turned into pneumonia by December. I was off the puffers and antibiotics by mid January. I missed two days of class. Then at the start of this month I got your classic cold: sneezing, itching, watery eyes...you name it I had a cold symptom. It didn't get into my lungs. It went the other way, into my sinuses. I missed one day of class. I am just barely getting over the cold and sinus infection when I get food poisoning from In and Out burgers. Really? I wonder who could be that unlucky and then I remember my students. They get EVERYTHING. And yes, sometimes they even fake it but that was not the case with me. So are infectious diseases getting worse?

When I was at Foothill College from 1992-1994 I never remember a class being canceled or people coughing and sneezing around me. Now it seems like the norm. When I am not feeling sorry for myself I am thinking about how all these flus and colds effect our students. They, in some ways, are at greater risk for all these things because they are more stressed, sleeping less, and still making a few bad decisions here and there. They miss class all the time. I am not sure what to do when my courses are so dependent on what happens in the classroom. We don't have a book for Statway and the online system can only go so far. They really need that classroom interaction to be learning. So what do we do with all these sicknesses. Should we say "don't come to class if you have a fever" like the nursery schools do? What do you do when a student misses an exam? I can't easily make up a new one. Those take me a few hours to come up with and the student can see the one taken the day before, or talk with other students about what's on it. It's not a secure assessment as soon as you hand it out but

you need to make allowances for sicknesses because they are real. At the same time you want to toughen up your students and get them to not pander to every little issue they have. I'm here today, stomach cramping, cold and no heat in my office! I have to give an exam. If I don't, then my whole calendar is off and that really can only happen once in a quarter.

Got any advice out there?

**Week 7: March 3, 2015**

### [Thank you to my colleagues](#)

I will admit that I didn't read every blog but I am so wholly impressed with my colleagues. You are all beautiful writers, thinkers and most of all teachers. I learned so much from what you wrote. I came to two conclusions. First that we all care about our students and want to inspire them in just the right way. We are thoughtful about what we present. The reflective part of teaching, I believe, is the only way we get better at our craft. The second conclusion is that we were all a little nervous to start putting ourselves out there and it got easier as we went along. I was so nervous to write but I was inspired by two of my students who I took to The Carnegie Foundation to speak on a panel. On the way back to campus they said that they volunteered to challenge themselves to speak out because they were so shy. I didn't even suggest that! I was so proud of them that they have inspired me to confess I placed into remedial english at Foothill College back in 1992 and I was so embarrassed. I challenged the exam by petition and got into ENG1A but I was extremely challenged in that course. I worked so hard on my writing back then and I went to the writing center daily but I was still left with that feeling like I wasn't an english person. It's the famous excuse for underachievement right? Everyone says it: "I'm not a math person" but I wanted to say "I'm not an English person" and I resisted, till now. I took on this challenge to put my writing out there for others to see. Many of you may thrive in the written word, but I

definitely do not. I get a little sweaty and worry about the content for days. And let's not talk about the procrastination. Perhaps it might be the same for you if you had to solve a bunch of problems and post your solutions. It's a very vulnerable experience and I would bet that many of our students are humbled and vulnerable daily. We don't need to contribute to that right? I like to remember these experiences that made me feel nervous and worried to relate to how my math students feel on the first day, or the day after a failed exam.

Thank you to anyone who read any of my postings.

(that's exactly 25 sentences!)

**Week 1:** January 18, 2015

[Two weeks and away we go!](#)

We're off to a good start having cruised through the first two weeks of the Winter 2015 quarter!

Just a little background about my experiences with this topic before we set sail on my teaching blog. This is the third quarter that I've taught the *Introduction to Engineering* course at Foothill College. Last year I started as a substitute for another instructor and am now teaching my second section of the course at night. As a graduate student at a large public university, I worked with faculty to develop curriculum and teach an introductory engineering course that had up to 1,450 students per semester. While finishing my dissertation, I moved to California and taught another introductory engineering class at a project-based high school where all students were expected to take the course in their senior year.

While I am forever grateful for the opportunity to teach and learn in these very different educational environments, I most enjoy that:

#1: This is fun and rewarding class to teach!

#2: For many students, this is the first engineering course they've taken.

One of the many things I really appreciate about teaching this course at a community college is the diversity of students. The diversity is both exhilarating and, to be honest, a bit daunting! After the course is offered to you, the instructor, you set about preparing your course not really knowing who will enroll and walk through the classroom door on that first night. This runs counter to my previous experiences at the university where it was on the thousand plus students enrolled to conform to the course agenda, or at the high school where I learned ahead of time from the other teachers what worked and what didn't for a particular group of students and had time to adapt the curriculum.

I've learned that students here arrive with a range of expectations, life circumstances, motivations, and learning challenges that reveal themselves over time. I've also learned that it is critical to be aware of these realities as soon as possible thus ensuring that the course is worth their time and effort. I now feel a significant responsibility to figure things out quickly (hence my fast moving sailboat). Teaching the same class from one quarter to the next can be dramatically different based on the students enrolled. My advice to a new community college instructor is to have a solid plan, chart your course carefully but be flexible and responsive to your students' needs.

During our first class I ask students to fill out an information sheet, voluntary and confidential, to let me know a little more about them. The sorts of things I ask include, a name they prefer to use in class, languages spoken, their learning preferences, what they hope to get out of the class, their interests and experiences with engineering, etc.

This quarter there is a nice mix of students who are "checking out" engineering as a possible career choice, working professionals wanting to start and/or finish a degree, international students newly arrived to the Bay Area, and students who've attended Foothill looking to transfer to a UC, state college or other 4-year university in California. In last quarter's class I also had high school students, students from nearby community colleges where the course wasn't offered at night and students attending other colleges who needed the credit but were unable to enroll at their schools due to impacted courses. Students this quarter reported using several languages including Arabic, American Sign Language, Spanish, Mandarin, Burmese, Cantonese, Korean, Indonesian, Vietnamese and Russian.

In this course we cover many topics with an emphasis on applied problem-solving (analytical and creative), the engineering fields (quick, how many can you name?), career opportunities in engineering, undergraduate engineering programs, technical communication (written, oral, and engineering graphics), professionalism, team work, project management, engineering ethics, real world engineering challenges and engineering design.



With the only pre-requisite for the course being MATH 220 or Elementary Algebra, students are not expected to complete weekly physics and math-based problem-sets as they might in a similar university course. Instead, the focus is on learning a little bit of all things engineering with a hands-on, active learning and project-driven approach. As with more and more first year undergraduate engineering programs, a highlight and culminating feature of our course at Foothill is the completion of a team-based engineering design project.

So, dear reader, with the background for this course thus established, my first teaching challenge of the new quarter is to establish a welcoming, inclusive and engaging learning community. There will be a lot of interaction and collaboration in this class, students will have questions and need feedback. It is critical to the success of this course that all students feel respected, valued, safe and understand the academic expectations. To tackle this, I am fortunate to have a team of trusted academic advisors (good education does not happen in a vacuum) who have offered the following sound advice:

*Students don't like surprises*

*Be fair and be clear about expectations from the beginning*

*Don't overdo group work*

*Keep it relevant*

*Make it interesting*

*Keep it challenging but achievable*

Among these most esteemed advisors are previous students, faculty as well as friends and family who have taken classes at community colleges.

Before the first class, I sent an e-mail introducing myself and reminding the students when and where we would be meeting. Two students later thanked me for this because they thought that classes started the following week. A few other students responded by

e-mail letting me know that we're travelling and would miss the first class (good to know).

On the practical and applied side of teaching this engineering course, I like to use slides in class to provide a record of the activities, content covered, and homework assignments. The slides are posted on a course website where students can review and/or download later. This seems especially helpful to students who might have missed or misunderstood something I said.

The first two weeks of class were focused on defining engineering as a profession, looking into a brief history of engineering, identifying the various engineering fields and exploring undergraduate engineering programs. Class time (over 3 hours per class session, held twice weekly) is a mixture of lecture, individual and group activities and presentations. There were also warm-up activities including a hands-on design challenge and the engineering field association game. As much as possible, I tried to have students work with others so they felt comfortable with their classmates. It is important to not make things a "competition" and establish the importance of a learning community, one where everyone has something to offer, risk is rewarded, failure is an essential and necessary part of trial and error, and together we learn and achieve more.

While I feel good about the direction and culture of the class so far, there is much ground to cover and individual personalities are starting to emerge. As the quarter proceeds, I'll need to be thoughtful about how I structure the activities and organize team activities. One success worth noting, on the 3rd class, I saw two students shake hands, introduce themselves and go about helping each other complete their assignment. How nice is that.

**Week 2: January 25, 2015**

### Work and school and work

Class only met once this week due to the Martin Luther King Jr. holiday. It was reassuring to see the students arriving to class midweek, on-time and talkative.

This quarter I tried a new approach to the whole “how should I, as an instructor, be addressed?” confusion. It can feel little awkward at times, wearing the professor suit. So, on the first day of class, I offered that “you can call me ‘Professor’ or ‘Jennifer,’ whatever you feel more comfortable with.”

I prefer being called ‘Jennifer’, but a lot of students are definitely more comfortable calling me ‘Professor’. What really matters though is that students are learning, that they are comfortable approaching me and sharing their thoughts, questions and concerns about the course. It was a good week for that.

We’re post census now, the roster has been tidied up, students are in attendance or letting me know that they will be missing a class. One student, who I was sorry to see drop, sent a nice e-mail letting me know about his job situation.

It’s feels wrong to lose students with full-time jobs. They are dedicated, have valuable work experiences and are serious about getting a degree but it is a real struggle. Many of them need to travel and/or often and unexpectedly stay late to finish a job. The way this course is structured, with a lecture and a lab, student attendance is mandatory. Sigh...it would be nice, one day, to offer a hybrid version of this course with more flexibility for working students.

Ironically, we’ve been exploring engineering schools to career pathways. Students seem to really respond to these lessons, and I am realizing how critical it is to have dedicated class time exploring future plans and sharing these with others. As a class, we did a “deep dive” into engineering programs, large and small, at public and private colleges and universities, in- and out-of-state, some with co-op opportunities,

internships and study abroad programs, some more design-oriented, and others research-oriented.

Students were encouraged to look at colleges and universities they hadn't considered or didn't know a lot about. From a list of schools I compiled, they were prompted to be open, to look beyond just the ranking, to investigate other aspects and objectively consider the pros and cons, to pay attention to their own needs and preferences, to think ahead a bit, to be aware of what matters and what interested them. It was encouraging watching students share out on these engineering schools, especially the ones they hadn't known much about.

Even with all the information on the internet, students seem to benefit from the shared information and conversations. They worked diligently through the investigation process and were respectful of other students' perspectives on these schools. Some students wanted to talk more outside of class and asked advice during the break. Another student stayed afterwards sharing his story and wanting to know more about certification programs.

I'm striving to make this inclusive, to establish that there is not a one size fits all career pathway before we get busy with the rest of the course content. It seems like a need and an opportunity. Some students are here with a lofty goal, all or none, to transfer to one of two elite universities. I admire this and it scares me too. Other students are likely underestimating themselves, devaluing their strengths and limiting their options. I wonder and worry about them, wanting to help but not wanting to assume. There are also students who need to stay closer to home or to enter the workforce in due haste with a job they are excited about.

This week I feel that there is a real gift in this, the "community" of community college life. There is something incredibly valuable in being in a class with others who share similar interests and goals, along with very different realities and new ways of moving forward.

**Week 3: February 1, 2015**

### Teaching and the experimental moments

Week 4 blew by. We've had a lot of students feeling "under the weather." Some missed class, sent e-mails, others came by to drop off homework, and one left early. The winds are picking up though. There is a midterm this week, another homework assignment due and a project deadline is fast approaching.

I'm still learning the ropes in teaching community college. I'm working things out, like student absences. I use a policy, approved by our dean, and it is stated clearly on the syllabus. I also have quiz policy, it's standard. I don't give make-ups but will drop the lowest score. But somehow, there are always unforeseen challenges to these policies.

These issues deserve attention but more importantly, I wonder if I am presenting the material in a way that is accessible and engaging to all students. Do I favor certain types of learners? Am I biased towards my own preferences and interests? Is this even necessarily detrimental to student learning?

Before continuing with this, I must confess that throughout my own undergraduate engineering studies, I was fed a steady diet of lectures, problem sets, readings from a textbook and traditional paper-pencil-calculator exams.

For this course I am curious to experiment a bit. I enjoy trying out new approaches, new lessons, assignments, activities and design projects. I look forward to giving that lecture for the first time or doing it again the second time in an entirely new way. I don't want to bore the students but I don't want to confuse them either, or lead them unwilling into some academic experiment gone mad. They signed-up to take a course, are possibly expecting that it be taught a certain way, and that needs to be honored.

But, at the same time, there is a good amount of latitude in terms of topics to focus on and ways to deliver the content. With each class meeting for over three hours and my

tendency/preference to not lecture the entire time, we do a lot of activities. A student told me last week he liked that in this course we “did things.”

Truth is, I can only listen to lectures for so long (as amazing as they may be, I zone out) unless there are a lot of visuals to go along with it. I’m also an introvert and too much noise and commotion exhausts me. An hour at Maker Faire (love it!) and I’m desperately looking for a quiet place to escape to.

What I like most about teaching is something I did not actually experience much myself as a student. I like the interactive, the challenges and hands-on activities, opportunities for expression, problems with more than one correct answer and multiple ways to get to there. It’s critical to keep it fresh, keep it real and keep it relevant.

Recently, I’ve been inspired by The Great British Baking Show. In the show, the group of bakers is given a scrumptious challenge and a few hours to produce a masterpiece. For the most part, they know the fundamentals, from baking tarts to custards, pies and poached pears, but they need to add their own artistic signature to it. This show is great fun and makes me hungry!

Why draws me to this show has a lot to do with the experimentation. It’s about the application of technical skills with the knowledge of flavors, textures, chemistry and presentation in order to create that exquisite baked delight.

This week I wanted to do something more meaningful. I assigned homework which moves beyond the standby “collect – grade – return to student” recipe. We were finishing a unit on engineering careers, fast forward to degree in hand and getting ready to for your first professional job. For homework, students were asked to search for jobs, one in a field of interest (e.g., civil, biomedical, etc.), another in a job function of interest (e.g., research, sales, design, etc.), and another for an international opportunity. They were also asked to include a short reflection on their experience and informed that they’d be sharing their findings with classmates.

The night students submitted their homework, we were short a few (under the weather) students. Taking a gamble, I had the students form two large groups to discuss and

prepare to share their findings. They were given a few guidelines and items to talk about. Then I checked in with each group to help them get started.

And...

I watched, I listened, and I waited for “it” to happen, for the spark, for the connection, for the interesting conversations to emerge. I thought it would take about 15 minutes, but at the 20 minute mark they were just warming up, by 30 minutes they were having a good time! By the way, did you know there is an engineering job to design parking lots (and it sounds pretty cool)? A lively discussion got started around the Glassdoor.com, a website where employees talk about working for different companies. And another interesting conversation got started on the differences between entry-level qualifications in Hong Kong and the U.S.

I’ve never tried large group discussions before, but they can actually work!

This even presented a fertile moment to followed up with a list of groups that hire engineers, places students might not have looked into (they hadn’t) and some career advice for new engineers (5 tips from experienced/seasoned engineers). Ok, so we went a bit overtime, but had some flexibility. Guess what? During the break several students kept the conversation going while others came up and asked me more questions.

This week we start the robotics unit, mixing it up a bit and hoping to build an assembly line with the robotics kits....we shall see

**Week 4: February 9, 2015**

### [A lot of guys](#)

We had a welcomed visitor come to our class last week to talk about the academic counseling services at Foothill. Being an evening class, a lot of the students weren’t

aware of all the valuable services available to them or were unable to access the offices during the day. On top of all the information he shared and questions he answered, his warm and caring presence brightened the night. His visit was especially appreciated.

When he came in, the students were working in groups of 3 on a robotics project. Imagine robotics kits and parts strewn about the tables, students talking, testing sensors and building a mechanized assembly line.

Our guest noted that there were “a lot of guys!”

Indeed, in this class there are a lot of guys, 26 to be exact, and 2 women. Last quarter there were 7 women out of 30 students in the class. This is not atypical for engineering classrooms around the country or worldwide.

According to the American Society for Engineering Education, among the bachelor degrees in engineering awarded nationwide, 19.1 % were awarded to women in 2013 (<http://www.asee.org/colleges>). This percentage has been fairly consistent over the past several years but is growing modestly.

The subject of low enrollment of women in engineering can be contentious and divisive. Some think that focusing on this can detract from providing opportunities for all students. Plenty of people have ideas why enrollment is low, or solutions on how to change the numbers. To me personally this matters, as do all diversity issues, because:

1. Engineers solve problems, technical problems that affect every part of our lives, of all of our lives, from the roads we drive on, to the ever growing list of technologies we interact with and depend on, to the safety of the foods we eat. We, as a society, need a diversity of voices and perspectives to find and address these problems.
2. Life is more satisfying and more meaningful when people have purpose and are able to develop and express their talents. Everyone benefits from this, we are more engaged and satisfied doing work we care about. If a road to certain fields is blocked or there is the perception that that road is not accessible to certain groups, there is a loss for all of us.



As a teacher, I have a role in this too. I am here to support and educate all the students including “a lot of guys” who are as different as different can be. It takes a lot of caring and understanding and attention to do this well. I want everyone to succeed and strive to do what I can to be supportive. There is also another way to look at this.

In a way, the classroom is the students’ first professional engineering gig. In the classroom, they form their first professional relationships, working with future colleagues and interacting with professors who can help them with networking and recommendation letters.

Their fellow students are catalysts for growth, pushing them to do better. Just this week, one team nailed their robotics challenge. Their design was exceptional, it was completed on time, it was elegant, accurate and reliable. After the other students gathered around to watch the demonstration with awe, they quickly returned to their own design tasks with a renewed vigor.

The boundaries of engineering and technology are vast and expansive. The classroom is a place where students are engaging in critical conversations about emerging technologies, engineering challenges, and future opportunities. The more voices and perspectives included in these conversations the better. The more welcoming and encouraging the classroom the better. Students need an open and respectful platform to share their views. The stage is being set for lifelong learning and critical thought (i.e., better engineers).

I was recently inspired by a story about a 90 year old woman who works for IDEO, a famous design firm in San Francisco. While she wasn’t able to study engineering, she has had a lifelong passion for design and innovation, and she has a history of producing design solutions. I was so encouraged to hear that she is a valued member on the design team because she has first-hand experience with aging, having seen elderly friends suffer tragic injuries from falling.

What inspired me the most though about this story was her lifelong desire to express her gifts for problem finding and problem solving. IDEO recognized, respected, and celebrated their good fortune by inviting her to work with them.

Three cheers for a lot of guys along with more diversity in the engineering field!

<http://www.npr.org/blogs/alltechconsidered/2015/01/19/377702882/at-90-shes-designing-tech-for-aging-boomers>

## **Week 5: February 15, 2015**

### Quiet

We had an exciting breakthrough this week. The clock was ticking on the last night of the robotics project to refine their team's design and join the growing assembly line. Our goal was to improve on last quarter's robotics project by linking the robotics kits into a functioning assembly system. The aim was to pass, throw, spin, roll and transport a golf ball down the line from one team's robot to the next. The student teams worked intensely...and, it happened!

The classroom was abuzz with activity and innovation as one student team after the other added their robotic designs to the assembly line. A team of three became a group of 9, then 21, all testing and tweaking, measuring and calibrating. By the end of the night, all the students were waiting with anticipation as the ball was transported through eight stations of the assembly line.

Cameras came out as several students made videos, while others working furiously to finish their tasks and join the larger group. It was truly a fun night. A student from last quarter came by to see the action.

The class read about "concurrent engineering" and now they were experiencing it first hand through this project. The divide and conquer worked, by breaking a larger design project into smaller steps with teams working concurrently but independently in order to meet a larger goal by the project deadline. They got to see first hand project management, teamwork, and cooperation to make something bigger happen.

But something else had been on my mind about the students, and this night in particular made me think about it again.

Overall, this class is what you might call “quiet.”

When I ask questions, someone always answers, in a quiet and thoughtful way. When they do group work, they work well together, in a calm, purposeful and quiet manner. Students often share things with me, ideas or interests, it is usually a private, one-on-one or in a very small group conversation. I sense a lot of creative talent in this class as well as several unique interests and passions.

At the same time, there are a few more outgoing students in the class too. They can be very animated and spontaneous, they share freely and tell it like it is. These students bring a welcome vitality to our evening class. I miss them when they aren't there and sense the other students do too.

The first time I heard about the book “Quiet” by author Susan Cain, I was driving home from a company dinner feeling anxious about my presentation the following morning. Savoring time alone on the drive home, I turned on the radio to hear her talk about her research and book on introversion.

So much of what she said resonated with my own experiences of feeling drained after a party, of craving solitude, preferring a long walk in the woods with my dogs over group hikes, grateful to have a few close friends, and a rainy day excuse to curl up with a good book. I was tired of been told “you think too much” and/or feeling apologetic for my reticent nature. Oh, it was wonderful to hear this radio conversation celebrating introversion.

While I cannot say with 100% certainty that many students in the class are introverts, I can confidently say they are “quiet.” Their quietness could be due to many things, from temperament, to personality, to cultural reasons, to being at school or even just being tired after a long day. And many of them do indeed have long, busy days.

So how, I wonder, do you support students who are quiet? For a short list, I draw from my own experiences:

- First off, appreciate your calm class. Do not take it personally that they aren't outwardly enthusiastic.
- Give them time to warm-up and to get to know each other slowly. Start with pair-share activities, and then introduce them to many students by mixing up the pairs.
- Let them know what's coming up so they can prepare. For example, let them know ahead of time that they are going to share their work, or that there will be a classroom visitor.
- Allow time before, during or after the class for them to talk with you privately or in a small group if needed.
- Ask them questions about their interests (and be amazed).
- Be a good listener.

And don't be surprised when, midway through your journey, the whole class joins together, without your direct instruction to build the most amazing assembly line!

P.S. if anyone reading this has ideas on supporting the more outgoing students, I would love to hear them.

Here's a link to Susan Cain's work: <http://www.thepowerofintroverts.com/about-the-author/>

**Week 6: February 23, 2015**

### [Static Un-equilibrium](#)

The tide is turning, we are headed in to the last few weeks of the quarter now. There is still a fair amount of content to cover in the Intro to Engineering course, including ethics, project management and the engineering design process. From this instructor's perspective, the class is now in cruise control mode. They've pulled through and are

effectively working together. The expectations have been established, and they have worked in teams that produce good results.

The final design project and new teams have been assigned. This design project is more open-ended and challenging than the previous projects. In the weeks to come, the students will be researching, building prototypes, preparing technical reports, and delivering design presentations. I'm excited to see the solutions that they will come up.

Meanwhile, three feet below the surface, is a current I have been acutely aware lately. Students experience this current when they are learning something new and difficult. They feel it when they are taking a test, frantic for the "A" they desperately need to transfer. It is unsettling and it knocks you off balance. Anxiety and panic can set in.

Professors feel this current too, perhaps a milder teacher version, but it affects us all. We might experience this when we are teaching a challenging topic for the first time or piloting a new lesson "on the fly" with too little time to prepare. It is unsettling and it knocks you off balance. Anxiety and panic can set in.

A few weeks ago I took over a professor's course at another college, a third of the way through the quarter. I only had a few days to prepare. While I am certainly qualified to teach the topic, it had been a good while since I last looked inside that particular textbook.

Being new to the course and college, I worked double time preparing lessons and reviewing the content. I took notes, solved problems, and started seeing vectors in my sleep. Day one, walking into the classroom and meeting the students for the first time, I did my best to reassure them that all will be well. Then the first wave hit me. It was time to swim, to swim smarter, and to make it out of the current safely.

Like the students, I too sought out more resources to help me and to help my new students. I looked on-line for tutorials, for solution sets, for software applications and for interesting projects. I even pulled my old textbook off the shelf.

Opening the dusty yellowed pages brought back a flood of emotions, remembering long ago when I was learning this subject for the very first time. Some of my old homework

was still folded between the pages. I was learning to solve problems in 3-dimensional vector space. I was confronted with new technical terms that I thought I was alone in not knowing. I was thrown off balance.

In my new state of static un-equilibrium, I saw parallel worlds between my experience as the teacher and the students treading in these treacherous waters. Yet, there was a distinct difference between these worlds. Having already swam in these currents, I knew what to do and recovered quickly.

Meanwhile, some students in the class are really struggling. They are working hard, but confronted with a challenging new content. They are questioning if something is amiss with them, because everyone else but them seems to “get it.” A few students, who are further along in their physics courses, seem better able to relate the material, having seen some of these concepts before. Anxiety is running high. Some students are panicking about an upcoming exam. One student told me about recurring migraine headaches. Another wanted me to sign a paper stating that he had the “A” desperately needed to transfer.

My anxiety has subsided after having a better sense about the class, and the material no longer being a distant memory. I am confident that the students will master these concepts too, and will feel the same someday. Mostly though, I am grateful for these currents and for resilience. It is important to be reminded of what it feels like to be in over your head because our students experience this on a regular basis. And this lesson I will likely not forget, ever!

**Week 7: March 3, 2015**

### Storming, Norming, Performing

A case of two classes and one instructor in later part of the winter quarter. The stages of team growth model we discussed in class are on my mind and provide a useful perspective.

According to this model, teams progress through a sequence of stages beginning with *forming* (everyone is awesome and this project will be a breeze!) then *storming* (some people on this team are a real drag and anarchy rules) followed by *norming* (let's make the best of this and bring order to the chaos) then *performing* (time to get things done by working together) and finally *adjourning* (so sad to say goodbye).

The stages of team growth are also present in the two classes I'm teaching this quarter.

The Intro to Engineering class just finished their second exam and are working on the final design project. There seems to be a good morale in the class and the students are, for the most part, in *performance* mode. The expectations have been set, the students know each other better now and are more familiar with my teaching style.

I moved up the start time of the exam last week to allow the commuters enough time to relax and prepare for the test. Most of the class came early and formed study groups. It was nice to see them studying and hanging out in class before the exam. When the time came, all the students were present and accounted for, they buckled down and took the exam seriously.

Meanwhile, in a college not too far away, another class is *storming*. I took this class over for another instructor a few weeks ago. Having the best of intentions, I try to preserve what he had started and at the same time to build off of my teaching style.

This had led to some stormy seas punctuated with moments of dazzling sunshine. I might as well be on a pirate ship. But, I'm learning a lot of valuable lessons here. And, it is at times like these that you really know what works for you as an instructor while

appreciating that there are other great ways of teaching too. They may not be your preferred ways of teaching but the students were used to these other methods and change is hard.

On a bright note, the students are still coming to class and several seem genuinely excited about the extra credit design project. While not everyone is keen on using the online simulation program, some are greatly benefitting. The students who have given it a chance seem to have a better conceptual understanding and like moving at their own pace.

The class worked hard last week, we solved problems and they asked many questions. They are also studying together outside of class. Hang tight, I think I see the "Isle of Norming" ahead!



**Week 1: January 18, 2015**

### [Got Access?](#)

I suppose in this very first blog, I should explain why I named this blog Access to Learning. Actually, I've had this blog site for a while (several years in fact), but between work, kids, and all the craziness that we call life, it sat empty. I got the idea for this blog when I was teaching in the Transition to Work (TTW) program at Foothill.

Teaching in this program got me thinking about all of the benefits that the college experience brings to students. TTW is a program serving young adults who have developmental disabilities. Most of our students won't ever go on to earn a 2 year degree or vocational certificate. Our best graduates get jobs at retail stores or at the local cinema as ushers. Others wind up as volunteers with non-profit agencies folding mailers, looking after animals or shelving books. These are, by no means, your poster children for student success.

And yet, every year, at graduation, parents and our alumni gush at their accomplishment of finishing one year at Foothill. "My son has friends!", "My daughter loved going to school and she has never loved school ever", "She's taken Caltrain to Foothill the whole year and never got lost!". Two years ago, one parent had tears in her eyes because that was the first time her son was asked to speak on behalf of the class. This young man, who rarely speaks at home and went to therapist after therapist to get him talking, nailed his presentation in front of an audience of 200.

That got me to wondering why this group of young adults always get left out of college. No one ever recruits them, they don't see college counselors in high school (I suppose the assumption is that they'll never go anyway). Instead they have transition specialists, job coaches, to help them transition out of school to "life". In other words, as soon as high school's over, their access to formal education, is gone. If you are a parent of a child with special needs, this is the day you dread the most. What are they going to do?

While everyone else has access to some form of education beyond high school, this very group that needs it the most, has virtually none. It really infuriates me- those who need school and education the most, get shut out. The smartest and brightest are always going to land on their feet. It's those who can't, that we need to help, who need this access.

So why Access to Learning? Why the blog you say? Well, I really wanted a place to document and record the stories of these students- not just TTW students, but many of the at-risk students I work with. Some have pretty severe disabilities, some are veterans who can't understand civilian life, and some who just plain drive you crazy but you know have no where else to go. I hope to do them justice by telling their stories, and while everyone else has their head wrapped up in big data, I hope no one forgets those who never quite make it into the dataset.

**Week 2: January 22, 2015**

### [American Sniper](#)

[https://www.youtube.com/watch?feature=player\\_embedded&v=5bP1f\\_1o-zo](https://www.youtube.com/watch?feature=player_embedded&v=5bP1f_1o-zo)

Have you seen this movie? I haven't. But many of our veterans have. And if you come to the VRC sometime, you'll hear that it opened up old wounds and brought back memories they want to forget. You'll also hear that as much as the movie brought back bad memories, our vets were more hurt and upset by comments and jokes from other movie goers about the value of this war and how worthless it was.

"Doesn't it mean something to people that I was willing to give my life, even for this worthless war, so that they don't have to?"

So if you are planning to watch the movie, will you keep in mind that there may be servicemen and women in the movie theater? And that whatever your opinion is about the war, or the military or the politics about the war, you should remember that there

might be someone in the movie theater who did live through that experience, did see his/her buddy blown up to shreds, who still continues to live with survivor's guilt and a multitude of physical and emotional injuries.

If you have watched the movie, or want to watch the movie, may I invite you to the VRC at Foothill to talk to a vet about their time in the military? Listen to their experience and perspective on what it was like out there? Or perhaps start a conversation with a veteran you meet about life after combat? If you need some help, like I did, here's a good video to help you out. Thank you.

[https://www.youtube.com/watch?feature=player\\_embedded&v=5P04stEjJ9E](https://www.youtube.com/watch?feature=player_embedded&v=5P04stEjJ9E)

**Week 3: February 7, 2015**

### [Anxiety Disorder](#)

Last night, I had one of those anxiety dreams. I showed up to a chemistry class and it was a mid-term I had no idea about and was asked to draw the molecular structure of some sugar... I'm not even sure I'm saying this right because it's been 15 or so years since I last had to do anything that involved a periodic table and molecules. Fear and anxiety gripped me in my dream. I could literally feel my brain working twice as hard to churn out the image of some molecule. I felt embarrassed and humiliated I didn't remember my midterm, or the contents thereof. The angst and agony was intolerable. Then, the utter relief when the alarm rang, and I awoke.

Many people I know have had some iteration of this dream. The details are different, but it's typically set in school, some event that sets off butterflies in your stomach and you're mortified at your inability to perform.

I try to remember this feeling when I see students whose primary complaint is school-related anxiety. In my line of work, I've met students who have literally shown up in my office right before an exam shaking, or throwing up, or have hands so cold and clammy

and their faces so pale you'd think they saw a ghost. The cynic in me always questions if it is real or if the student is faking it or if such anxiety could really exist. And then it does hit me: I've always been pretty good at school. If I get a bad grade, it's usually because I didn't study. School was not a scary, unkind place for me. And yet, I still get these anxiety dreams where I wake up relieved to find out I did not have a test that I forgot about. The anxiety must be a million times worse for students who have not had the smooth sailing experience I had in school.

I know some students have anxiety or develop it because of the high stakes nature of tests and exams. When I first started work as an educator, I equated a high stakes exam with the SATs, or LSATs, or GREs, or MCATs. I've since come to realize that for many of our students, high stakes isn't just one of those acronymed tests, but every single mid-term or quiz or final could be a high stakes exam. I really understood this when a student I worked with stood to lose financial aid, his income and possibly housing, if he didn't pass his accounting course; a student I'm working with this quarter stands to lose her health insurance if she doesn't get a pass in her math requirement- a really big deal if you are chronically ill with a debilitating disease. High stakes at the community college really takes on a whole different meaning.

Other students develop what I call school-related PTSD as a result of their experience in elementary and secondary school. They didn't read at grade level, or could not keep up with math, or always tank standardized tests and exams. People tell them they are smart, but the tests always say otherwise. Or they're the ones that teachers pick on- "Sit down", "Don't squirm", "Pay attention", "Don't be careless.", "Read carefully", "Try harder". What happens afterwards is this: I see perfectly smart, bright students second guess themselves in exams.

"I think the answer is (B), but I'm always wrong, so it must be (C)."

"Where's the trick in this question?"

"Can it really be this easy? I must not be seeing or understanding the question correctly."

All this second guessing results in a bad grade, and the anxiety ensues.

There was a time when I wished we had some superpower to fix, tutor and remediate all of these students' anxieties away. But a really wise colleague of mine (Margo Dobbins) once said it's not the content of the class that matters, but the contact with the student. Coincidentally, this quote from Maya Angelou surfaced on my Facebook newsfeed this week:



So I guess what I'm trying to say, in this albeit long-winded way, is that I remember this the next time a student freaks out in my office, or cries over an exam or worries out of control. I hope they leave feeling just a little less anxious.

PS: If you want to learn more about anxiety disorders, here are some totally scientific, peer reviewed links that I think are awesome.

[Panic Disorder](#)

[Test Anxiety](#)

[Facts about Anxiety](#)

[Reducing test anxiety](#) => I really like this one. It's produced by ETS, the same folks who produce the SATs.

**Week 1:** January 19, 2015

### [Am I really writing again?](#)

Just about five years ago, I was selected to participate in a nationwide grant focusing on developmental math and English pedagogy. To be honest, I thought I was signing up to work on a project that would teach me how to better use technology to improve success rates in basic skills courses. I was chosen, I went to Arizona for the kick-off meeting, and there I found out that the project was about using online tools to allow faculty and researchers to share, via online postings and video, what the developmental classroom looked and felt like. “What? No bells and whistles for me to work with? You just want to know what I do each week?” At the time, I was skeptical that this was even worth it. How could online postings and reflections really communicate what happens in the classroom? How could anyone really see what worked and didn’t work for students? Are you kidding me? You want me to WRITE every week? I’m a math teacher and I don’t really like writing.

That project lasted two years and it was by far the most rewarding professional development experience in my 20+ years of community college teaching. It turns out that online postings and reflections can communicate what happens in the classroom. And, with a little coaching, math faculty can tell a story about their classroom that consists of something more than bullet points and simple sentences.

- I still love bullet points, and
- I believe simple is often the better approach.

And, I learned that faculty really appreciate a venue that allows honest sharing of ideas and an opportunity for reflection. That’s why I’m here.

My work-life is split between teaching and non-teaching duties and it is very easy for the non-teaching work to gobble up all my time. But, my heart is in the classroom and I still want to improve.

My plan for the first few weeks of my blog is to reflect upon my face-to-face course (I only have one). I have 37 students, and if I can get just 3 more students through the course, that would be likely be more than a 10% increase in success rate. And, if those students happen to be from our “at risk” populations, it would be an even bigger deal in terms of campus equity.

What I’ve noticed thus far is that I have a handful students that are very underprepared, at least based on the activities I’ve done thus far. I’ve worked with placement tests long enough to know that they aren’t particularly accurate, but I often wonder why the underprepared students in my class seem to more often be students of color. Is the placement test less accurate for that population, or, are the other students just better at covering up their weaknesses? Or, maybe it isn’t true at all and it is just my perception. No matter the reason, it is what I have noticed this week.

On the flip side, I’ve noticed something different this quarter compared to what usually happens. When I’ve asked students to volunteer to go to the board to write a solution, or asked for explanations about how or why the mathematics works, my most vocal students have been male students of color. Two of them were my students in the summer bridge program, so they already know my classroom demeanor and me. Maybe that plays a role.

My plan for next week is to individually check in with 3 or 4 students that I believe are most likely to need extra support and make sure they know about all of the support available on campus. It sounds so simple, but I find that if I don’t plan to do it, it is easy for these students to blend into the wall or slip out the door quickly before I can get to them.

I’m also going to find a few students who are better at math than they believe. You know the students, the ones that have the right ideas but tend to hide what they know. I’m going to try to build confidence in these students, to find a way to let them know that I know they are “good” at this math. If they feel good about what happens in class and they know I notice, they will keep coming. And continuing to come to class is a big, big deal in basic skills math.

Next week, I'll let you know what exactly I did and how it went! And, maybe I'll get around to explaining why my blog is called what it's called. But, you'll have to come back for that.

## **Week 2: January 26, 2015**

### **Fantastic Friday!**

#### ***Week Three***

It was an up and down week in beginning algebra. Tuesday was the first day of word problems. Not the "Train A leaves a station heading toward Train B" kind of problems, the even more useless type of word problems that we start with in a traditional algebra class. These are the word problems that have minimal real world applications, because if they did, they wouldn't be in a beginning algebra class. Therein lies the problem. We try to apply really basic symbol manipulation at an early stage to show these techniques are useful, but the type of problem available with so little notation isn't very real. Maybe that's not 100% true, but it feels that way.

That's not to say you can't solve interesting real world problems with this level of student. You can. You can actually do it with number sense and some basic proportions. But that's not our curriculum. Our curriculum is "old school" algebra, which is tough to combine with any number sense and proportional reasoning. Thus, I follow the course outline and try my best to entertain my way through it.... silly stories and analogies. Fortunately, many of us in the math department have a quantitative literacy dream, and maybe someday the old school algebra will be replaced with a better quantitative reasoning course. Hey, maybe we math folks should write our own "I Have a Dream" speech about our curriculum.....

So back to class. In last week's post I said I would check in on four students. Let's call them A, B, C, and D because I'm creative that way. Student A came to class late



Tuesday and missed class Thursday. “A” made it to my office hour on Friday after an email, and all I can say is that her life is very complicated....while in my office her phone rang twice with emergency calls from a bipolar friend on the verge of being arrested and/or committed. Despite this, she stayed for Fantastic Friday and barring more drama over the weekend, she appears back on track.

I checked in with B on Tuesday and all seemed to be going fine, then he missed class Thursday. Day care issues kept him from class, but he made it for Fantastic Friday albeit 20 minutes late. Girlfriend late to get his daughter. C came to class every day, but is really struggling. I encouraged her to go to the Foundations lab and walked her halfway there after class Thursday. Student D is behind and struggling, but I’m hoping Fantastic Friday encouraged her to get some extra help. She seemed willing.

So there it is. I posted that I would the check in with four students and it happened. Most likely it happened because I knew I had to report to whomever is reading this. That’s just the reality of my world. First exam is this coming Friday. Hopefully they will all show up for the exam.

### ***Fantastic Friday***

Tuesday’s word problems started a divide in the classroom between those who got it and those who were heading for the exit. Thursday was a totally separate topic, but the divide felt greater by the end of that class. Not that they didn’t understand, but there seemed to be an attitude shift. Not sure why. After class Thursday, I realized that I had to do something ASAP to bring this class together again, or I would soon have only 20 students with any chance of passing. What should I do? 22.5 hours to figure it out.

9 pm Thursday night. Still thinking. Then it hits me like a ton of packing peanuts. Player-Coach. That’s it. (Shout out to Bronte Miller at Patrick Henry CC for teaching me this one.)

I created a set of review problems from the last two weeks, with emphasis on the types of problems that seem to split the class. Students work in pairs; one student is the “player” and one is the “coach”. The player holds a pencil (or pen even though that

drives math teachers crazy) and works a problem. The player can talk to the coach if they need help or are unsure, and the coach must watch the player closely. The coach can correct the player if needed, but is NOT allowed to write. Not even hold a writing implement. This forces verbal communication, use of math vocabulary, and forces students to interact. The students chose a role at the start and switched roles every 3 to 4 problems, as directed.

All of my student pairs were FANTASTIC. I've used this type of activity before but had pairs with two "lost" students or two students who understand everything, and that makes it hard. Or, I've had students just refuse to refrain from writing in order to communicate. Or, if it is a topic that almost everyone "gets", it isn't productive because the coaching isn't needed.

But, this time around, all of my pairs had multiple problems they were unsure of, and everyone followed the rules. It probably helped that it was a beautiful day and I let students sit at the tables outside if they wanted a quieter space to work. The extra space gave me time to interact with my students in a mellower setting.

My students seemed to appreciate the time to review and clarify some ideas, and said that even though it was hard to have to TALK about the math instead of just write it, it was actually fun. We all walked out feeling positive about math class again. A Fantastic Friday indeed.

**Week 3: January 30, 2015**

### [If We Build It, Will They Come? Not likely.](#)

A few years ago, I met the English faculty who started the "ALP" courses at their college. I think ALP stands for Accelerated Language Program or Accelerated Learning Program. English faculty likely know the correct title. It is an alternate way of offering college level English writing courses to students who didn't have the skills to place into

a college level course. I know of at least one college that has tried to follow that model for transfer level math. I think we could consider something like this at Foothill but I'm not sure which level is best for this. Let me explain.

Some colleges have a college level math class, like Math for Liberal Arts, in which they enroll students who have placed into or taken the prerequisite course, but they also enroll students who took the placement test and came close to placing in, but didn't quite make it. These students can enroll in the college level class as long as they also enroll in a co-requisite support course. The same instructor teaches both courses. In a class of 35, there may be 17 or 18 students who got into the class the traditional way, and the other 17 or 18 are taking the supplemental course. Nothing changes in the instruction time for the transfer level course, but half of the class stays for extra time and support two days a week. Time in the supplemental course is not spent on individual tutoring help. Rather, the group spends more time discussing the ideas covered in the regular lecture, and then addressing any weaknesses or skill development needed by these students. It's a model that has worked well in English, and a few campuses are trying it for college level (non STEM) math classes.

I'm thinking about this now because two of the four students I targeted for an individual check in during week one have just dropped. They dropped because they were both lacking prerequisite skills, which I could clearly see in week one, and the class just moved too quickly to allow the skill building necessary to keep up. I don't think these students need to take the whole prerequisite course. But, they needed probably twice the class time to review the skills they once knew but have forgotten. They followed all my lessons in class but could not execute independently because the manipulation skills were rusty. A supplemental class, like the ALP model for math would really help in this case.

These students, however, actually had a placement in this class. In the model described above, the students who are required to take the supplemental class do so because it gets them into the college level class right away. They can finish the math requirement in one term of math instead of two. Most basic skills students are hoping for the best outcome with the shortest time spent in class. So these students won't sign up

for an extra class voluntarily. I know that every quarter students need it and I can see it within two or three days of class with them. No need to wait for an exam. It's that obvious.

How can we build a support system that addresses this need? If I had the answer to this, I'd be famous...well, famous in the world of developmental math instructors anyway.

Of my two students who dropped, one is now enrolling in a lower level class at West Valley College. She understands that she needs the prerequisite skill development, but I believe I could have helped her with a few extra hours of class each week. She is now enrolled in a semester long class and will not take beginning algebra until next Fall. I do not know what my other now-former student is planning, but I do know that if she re-enrolls in beginning algebra next quarter, she will most likely re-live the same experience again, only it will be slightly warmer outside.

I have three other students on my radar right now. I am checking in with them regularly and spending time with them after class. Exam one is this week. Stay tuned....

**Week 1: January 19, 2015**

With Fire in my Belly

By the eighth week of the quarter, I'm tired. Very tired. Hard working students are on track with their learning while some previously detached students become industrious. Their opportunity to get "paid" for their effort, via a passing grade, has almost passed. They sense this and approach their work with vigor. I hope the best for them, but I shudder at the thought of what they still must do. It makes me even more tired and I turn my mind away from the thought. I go to an extra yoga class and try to let go.

Then, in my mind, I look around and start to take stock. Which students are thriving? Which students are at risk of failing? Which ones are performing below their abilities? Then I think about what I've done and what value it had. My conclusion is almost always the same. I'm convinced that my choices benefited (were perhaps even ideal) for some students. But I'm also convinced that my choices were not what all the students hoped for. Then, in my mind, I look to the future. Should I do more lecturing and less group work next time? Or am I happy with that balance? Should I be stricter or more flexible next time? What could I do to help them better understand improper integrals or sequences and series? How can I help them to see that most things are the way they are not because of a weird, made-up rule, but rather because they really couldn't be any other way. One of my mentors taught me that. "You have to try to get them to see that it couldn't be any other way."

And as I think these thoughts, ideas always come to me, perhaps one last activity I can give them on a hard topic. Then I shift my sights to what is coming up. As I prepare my final exams, my mind becomes distracted, always wanting to look forward to what I will do differently next time, next quarter. My mind clears and my belly seems to fill with fire. And right then I know that I can do anything. Right then, I know the creativity, passion, and insight that lives within me but wanes under the day to day demands called work load. Right then I feel the power that I have and recognize that the window of

opportunity is short and precious. And as I grade the finals and observe what students understand and don't understand, I scribble down my ideas to improve my teaching. I turn in my grades; and knowing that I will not have time to get to the bottom of my list, I get started. And that time between quarters, away from daily work commitments is amazingly liberating and precious. With fire in my belly, and love in my heart, I think, "this is who I am."

**Week 2: January 26, 2015**

### Modeling my Values

About three years ago, I discarded the mind-numbing, unproductive practice of taking roll. And on the first class of every quarter, I do something exciting instead. As students enter the room or work on a task that I've assigned, I MEET them. I look them in the eye and smile and shake their hand and tell them that my name is Jennifer. If they don't tell me their name, I ask them for it. I welcome them and I make a note on my roll sheet that I met them. I hear their name, I see how it's spelled, and I write down a phonetic spelling or a preferred name if they share one. It takes a long time and it is worth every minute. I always give them a task to complete so they're not bored. I pause at times and try to recall the names and faces of several students who I've met so far. I start the process of learning their names. And because it is challenging, it is fun and exciting. And I share that with them. And I let them witness my struggle, my effort, my failures. And I use it as a metaphor for the learning that they will engage in all quarter long and beyond.

Except for a few of you, I did not know your names before I met you today. But look, I think that I can remember a few that I've learned this morning. [And I smile at a few people and confirm their names.] I will continue to work hard to learn your names, and within a week or two I will know them all. And you will have to put your mind to learning many things this quarter. But because you focus on it

and make a point to learn it, you will, just as I will learn your names because I make a point to.

Over the next several days I take several opportunities to practice their names, usually by collecting and returning papers, and almost never by calling out 35 names in quick succession. They appreciate my efforts and I let them know that I appreciate their efforts too. They see that I forgive myself when I make mistakes and that I keep trying. After a few days, I know everyone's names and I show off by going through the room and calling out each person's name and they are delighted. I tell them that learning is tenuous; although I know all of their names right at that moment, I will surely forget some over the weekend. I tell them that they have surely forgotten some of the math they will need for this class. That's natural...there's nothing to be done about it except learn it again when they need it. I promise to point out along the way things that they'll need to recall or relearn.

And on Friday of Week 1, I leave class, content that I am communicating that I very much value sustained effort, forgiveness, and resilience in the face of set-backs.

It makes me very happy.

### **Week 3: February 2, 2015**

#### **Mind-Blown**

In Fall 2014, something happened that changed me: as a teacher, as a parent, as a person. That fall, I had numerous Middle College (high school) students in my trigonometry classes. They were delightful and I enjoyed them immensely. But the experience absolutely blew my mind.

As a graduate student, I got my first teaching assignment at age 23. That was at San Francisco State University, where the average student was in their 20's and where many of my students had put off their math requirement until the end of their education.

So most of my students were about my age and many were older. So I always saw them as young adults. At age 26, I started teaching at Foothill College. I noticed that the students were a bit younger, but I really thought nothing of it.

Fast forward 18 years. My daughter is almost 15. My son is 11. I have numerous “other children,” kids who I’ve known and cared for over the years. I’ve known a few of them since birth, many since preschool or kindergarten. They are the children who grew up with my kids. I love them. I love their families. And I realize that my daughter and her peers, freshmen in high school, are just 2 years younger than these Middle College students in my class. Like shifting tectonic plates, my mind is completely blown.

At that moment, I realize that my students are very, very young. This is a shift, not in circumstance, but in perspective. I never saw my students as young or inexperienced. I saw them only as adults, as students. But at that moment, I see them through the lens of my experiences of the last 15 years. I see them as I see my children and all of my children’s friends. And I realize that they are not that far removed from childhood. And all the hope and care and concern I have for the children in my life is extended to my students— instantaneously, at the moment of realization.

And in that moment, something starts nagging at the edges of my mind. I can’t see it, but I feel it. It takes longer, perhaps days or weeks to come into focus. And then, for a moment, I see it. My 15 year old is not that far removed from adulthood. And for a moment, all of the worries and fears that try to creep into a mother’s heart are exiled and I experience a profound sense of peace. And that place is in my heart now, and I know how to find it when I need to.

And I feel a confidence about my students that I never felt before. I see them as works in progress, as young people trying to figure out who they want to be and how they want to be. I see their families, in my mind’s eye, hopeful, anxious, proud, forgiving, loving. And although I know that these young people are adults, I no longer expect that they will have everything figured out. And when they make mistakes or when they seem a little lost, I figure the best I can do for them is show them a little kindness, like the many people who have shown me kindness, especially in my youth.



**Week 4: February 9, 2015**

## [Trying Something New](#)

### *Trying Something New*

I know the math that I teach. I know how to explain the concepts and I know how to explain the mechanics. I am not as good at explaining the applications. That is something to continue to work on. But if I can explain the concepts and the mechanics, why aren't my students universally more successful than they are, at least with those parts of the class? I think that the students' ability to manage their workload is a big part of the problem and I think that I am not completely successful in setting the tone that I want to.

Here I'll share my latest attempt to address these issues and then I'll ask you to share what you do!

Before this quarter started, I sat down with my favorite course and typed up a page of directions for every day of the quarter. Each page was to be used as a cover sheet and the work listed therein was to be submitted at the next class meeting. I decided to purchase a binder and binder dividers for every one of my students, in an attempt to set the tone of high expectations and high commitment. It cost me about \$2.25 per student. I didn't have time to assemble the binders, so I just took in all of the components on the first day of class and wrote directions on the board for the students to follow to assemble their binder. They were very appreciative. When they left class on Day 1, every student had a checklist of exactly what they needed to do each day of the quarter...organized in a binder. And almost every one of them is turning that work in each day! Since I believe that workload management is one of the greatest obstacles to success in the calculus classes, I am hopeful that this daily submission of work will translate into an increased success rate and better grades in general.

The world has changed a lot since I was a student. As in the past, students are oftentimes taking 3-5 classes. Only now, students might have 3 or 4 resources to

access per class! With such complexity, it can be quite difficult for a student to keep track of exactly what they need to be doing each day. Just as our workload (and the complexity of our job) has increased with the advent of email, SLO's, increasing numbers of committees, and online resources, so has the workload and the complexity of student life increased. It may be mutually beneficial for us to simplify our own lives and the lives of our students by providing this kind of resource at the outset of each quarter. Then we could all focus on the more important tasks of teaching and learning.

Imagine if we could increase success rates by investing a few dollars per student! Wouldn't that be amazing!

**Week 5: February 16, 2015**

**Our Core Values: Honesty • Integrity • Trust • Openness •  
Transparency • Forgiveness • Sustainability**

***Honesty***

I admire the student who turns in partially complete work, with a note telling me that it's not complete, that he wanted to do more, but that it was all he had been able to pull off in the end. I admire the student who writes on her exam that her answer is wrong but that she has been unable to find her mistake. I admire the colleague who shares his assumptions, his choices, his motivations. I admire the colleague who tells me how they'd do things differently than I have.

My pledge: I will strive to speak the truth compassionately.

***Integrity***

I admire my online students who help me to maintain the integrity of the online format—the ones who remind their peers that discussion of the quiz should wait until after it has

closed. I admire my colleagues who do what they believe in—even though it leads them to make different choices than I would make.

My pledge: I will seek out the best in my colleagues and students. I will strive to identify their successes.

### ***Trust***

I admire the student who trusts that I have his best interest at heart. I trust that my colleagues and dean wish all the best for me, as I wish all the best for them. I trust in my belief that when a person is well cared for, they make the world a better place.

My pledge: I will trust that my colleagues and my students are doing the best that they can and that they know that I am too.

### ***Openness***

I admire the student who comes to class, open to whatever new experience or approach she encounters. I admire the colleague who does the same...the colleague who listens and reflects and considers before deciding whether they like a new idea.

My pledge: I will strive to be open with my students and my colleagues as well as to the changes that happen with time and place.

### ***Transparency***

I admire the student who can discuss his progress transparently: “I’m completing all of the exercises, but not the activities, because I have limited time and I seem to get more from the exercises.” I admire the colleague who is transparent with her motivations: “I wasn’t getting enough sleep last quarter, so I decided to give credit for participation rather than grade the quizzes.”

My pledge: I will strive to be transparent; and if I fail, then I ask that you give me another chance by asking for clarification.

## ***Forgiveness***

I admire the student who can forgive herself, because then she won't be held back by guilt. She will forgive me and her peers when we have a bad day and she won't use us as an excuse to give up learning. For all these same reasons, I admire the colleague who forgives himself and his colleagues for their imperfections.

My pledge: I will give my students many opportunities to show what they understand and what they can do. My grading plan will allow them to recover easily from a bad day or from a previous misconception. I will forgive myself and my colleagues for our bad days as well.

## ***Sustainability***

I admire the student who practices finding balance in their life, engaging in practices that can be sustained throughout the quarter, the year, their education, their life. I admire the colleague who tries for the same.

My pledge: I will strive for a balanced life and I will encourage that in my students and in my colleagues.

**Week 6: February 23, 2015**

### **Reflections on a Changing World**

I like to reflect on how the world has changed. It reminds me that my understanding and assumptions about the world are often based on outdated information. Much like Euler's method, it provides me with the opportunity to reassess and adjust, hopefully for a better outcome.

**When** I was a student, there was no email. In the semester system, I

**Today**, students can send a question via email any time of day

had 3 hours per week with my instructors. They could not intrude upon my time, except during those 3 hours. There were no email reminders or last minute requests to prepare something for class. If I didn't ask my questions during class or email, I was out of luck.

**When** I was a student, there was just me and my textbook. There was no internet. My instructors certainly did not expect me to go beyond my textbook to research the topic (unless they assigned a research paper).

**When** I was a student, graphing calculators were just coming into

or night. But they don't send many. I, too, can send them emails, if I have an idea of something that might help them prepare. We had a long weekend this quarter. And there were no emails passed. I thought the students were as reluctant as I was to check their email during that beautiful, warm weekend.

**Today**, there is Google. With a few strokes on the keyboard, a student can find videos and tutorials on any math topic I teach. This allows students to hand-pick the resources they most like. That might increase student success, especially when a student needs to refresh their skills with a prerequisite topic. How has our teaching changed? Do we expect more of students, knowing that they have this resource? Do we expect more or less of ourselves?

**Today**, I expect my students to be proficient at analytical techniques.

existence. No one that I knew had one. We did all of our work analytically. Well, once I took a class in which we wrote programs to carry out numerical methods, but that was a special and unusual class.

**When** I was a student, there were no online homework systems or ebooks. But teachers oftentimes recommended that we buy the “Student Solutions Manual” or the “Study Guide” to accompany the text. We had to carry our texts around with us. We didn’t have tablets or online access.

But I also expect them to develop a better intuition, based on the types of questions that they can answer using a graphing calculator. I expect that they can use their calculator as a tool. The calculator makes some tasks easier. It makes the mathematical experience richer than mine generally were. Do I expect more or less of my students than my teachers expected of me?

**Today**, students can use an ebook and access their text using a tablet or computer. But they may have to use several different Learning/Course Management Systems in a given quarter. Here are some that I’ve had my students use: Course Studio, Etudes, Webassign, MyMathLab, CourseStudio, WileyPlus. Colleagues in my department have used Aleks and Blackboard and others as well. Again, students have more ready access with these, but mightn’t they distract the students from the learning at hand? And if the medium is hard to figure out or

behaves unpredictably, then to what extent does it become a barrier to learning? Do these systems save time? Or do they take time?

**When** I was a student, my life was pretty simple. Each day, I woke up, ate breakfast, and went to school. Between classes, I worked on homework. My parents provided me with food and shelter and a car. There was no need for me to contribute funds to the household. I had a little job to pay for gas and entertainment. Later, my jobs got bigger, which got in the way of school. I found that I had to work fewer hours to stay successful in school.

To what extent do my students have a simple, secure life? Does their family provide them with food and shelter? Or do they have to contribute funds to the family household? Do they have a job that's manageable? Or does it get in the way of their school success?

**When** I was a student, I had about 10 hours worth of television programming that I hoped to watch each week.

**Today** there seems to be an unlimited supply of entertainment, accessible at any time via a computer or smartphone. How does this impact a student's studies?

What would it be like to be a student today? Perhaps a professional development leave could answer that question. What would it be like to be an 18 – 20 year old student today? I don't really know of a way to answer that question. Any thoughts?

**Week 7: March 2, 2015**

### Placement and Assessment

I have been thinking a lot about placement and assessment. So many questions fly through my mind:

Who belongs in my class? What can I assume about the students who ARE in my class? What effect do my assumptions have on my students? What effect do my assumptions have on my teaching? What should I do if I discover that I've made an assumption that isn't true? These are just a smattering of the questions I've been asking myself this last year. My opinions and answers are still in development. I'll share where I'm at right now.

1. Trained in logic and proof, I understand that conclusions are unreliable if the corresponding assumptions are not met. So while I have to make some assumptions in my teaching, I know that I absolutely should not base my work on any assumptions that I know to be false. For example: There is so much that we learn and forget! If I know that many of my students will be ill prepared to recall the background knowledge needed for a new topic, then I had better not assume that they will be ready with that background knowledge. I don't have to teach them it, but if that bit of knowledge is on my wish list of what they're good at, I think they'll be more successful if I give them an exercise that reminds them of that stuff that they learned once and need to recall now.
2. I used to think that some students did not belong in my class. I used to think that something went awry in some cases. "How could that person POSSIBLY have made it through all the other classes and yet still be so ill-prepared to succeed in



my class?!” I even used to try to figure out what had gone wrong. But now, I know that it really doesn't matter. And I believe that every student in my class belongs there. Some will find it easier to succeed and some will find it harder to succeed. But if they've placed into my class or if they've taken classes that serve as prerequisites for my class, then they do have the mathematical background to tackle the ideas in my class. For example: Many calculus students entering my Math 1C class still struggle with the difference between power functions and exponential functions, topics from algebra and precalculus. I used to think that one solution was to send them back to an earlier class. Now I think that that might be the worst thing in the world for them. They are intellectually ready for Math 1C, and their understanding of power and exponential functions will deepen with the kind of work we do together. But the moment I assume that they understand those functions as well as I do, I am bound to create activities that are not helpful, except to the lucky few who remember more than their peers.

3. No one would ever look at a group of students and tell them that they should remember everything they've ever learned. But I have been repeatedly guilty of believing just that. Whenever it suited my needs, I would think “they should remember how to do this; they learned it in algebra!” I'm speaking in the past tense because I hope that I never do that again. Now I tell my students, “you can't possibly remember everything you've ever learned. But when you find that you need a skill that you've forgotten, well, that's the time to relearn it or remind yourself of what you used to know. And if there's something that you need and you never learned it before, that's OK too. There are lots of resources; and your teachers will always be happy to help you out if you run into trouble along the way.”
4. There are two experiments that I am dying to play with.
  1. I'd love to take a group of students who pass a class and give them a final exam a second and third time, maybe one month after they pass and again one year after they pass. I'm really curious to know how they'd do.

2. What would happen if I tried to complete an exam from a class that I haven't taught in 1 year, 3 years, 5 years, ever? I think it's safe to predict that I would not do well in some cases, depending on the class, the style of the exam, and the length of time since I thought of anything related to it. And what conclusions would be reasonable? I am thinking of this because of the conclusions we draw from placement exams. Are they reasonable? A student who just completed a course in differential equations could expect to outperform me on a differential equations exam (unless I prepared myself in advance). Does that make them more qualified than me to teach differential equations next fall? Of course not! I think we need to think of these scenarios when we're working on placement mechanisms for students.

I don't know how to end this, because the ideas are still bouncing around in my head. But thank you for listening to a first attempt to get some of them on paper. You know, they say that the act of writing helps you to form the ideas...

**Week 1: January 3, 2015**

**My First Lesson in Research**

When I was in high school, I developed a coffee habit. Believe it or not, that was actually the extent of my drug use, but with nothing more disturbing on her mind, my mother worried that caffeine might be bad for me and kept encouraging me to quit. I didn't want her to nag me, but I was a good kid and didn't want to do anything behind her back either, so I made a deal with her: if I could prove that caffeine was harmless, she would let me drink my coffee in peace.

Off I went to the library and consulted the librarian. Now, here's the unfortunate part of the story where I have to date myself. This was before the Internet! Before computers! Instead of flexing her fingers at a keyboard, the librarian took me to a special section and showed me how to use a set of green books called *The Readers' Guide to Periodical Literature*. There was a volume for each year, and I paged through the most recent, looking for coffee and caffeine, and found a list of articles. My small high school library didn't have all of them, but it did subscribe to several of the listed magazines. I filled out a form for each article that looked interesting and handed the little slips of paper to a student worker at a window I had never paid any attention to before. A few minutes later he returned with a stack of magazines: my articles.

Alas, my mom seemed to be right. Many articles described studies that showed caffeine could cause mood disturbances, anxiety, sleep disruption, and other problems. On the other hand, some claimed no ill effects at all. With only a slight pang of guilt, I photocopied two articles proving my case to take home to Mom and disregarded the others. Her mind was put at ease, and I learned a few things about research:

1. Libraries hold a lot of information and organize it in clever ways to make it findable.
2. Librarians are there to help you.

### 3. Proving a point is different from a sincere search for knowledge.

Methods of library research have changed a lot since then. Troves of information that used to be stashed away in esoteric reference books are a ten-second Google search away on your smart phone, but those early lessons hold true. Now that I work on the other side of the reference desk, I know a few other things. The librarian who helped me that day was also a teacher, and that is definitely how the librarians at Foothill College think of ourselves. Every question at the reference desk offers the potential to improve a student's information literacy. The first week of the quarter I interact with many students who want to know if their textbook is on reserve in the library. It would be easy to do a quick search sitting at the reference desk and tell them yes or no, but I go with each student to a public computer, show them our home page, and walk them through a search in the library catalog. I hope that by doing the search themselves, they will imprint these information portals in their neural pathways.

Something else I've learned on this side of the desk? Librarians *like* to help students meet their information needs!

**Week 2: January 19, 2015**

### [Charlie Hebdo and the Library Bill of Rights](#)



The day after the killings at the offices of Charlie Hebdo, we consulted in the library about what, if anything, we should post on our Facebook page about the attack. “Je suis Charlie?” A cartoon from the magazine? While we don't typically post on current events, freedom of expression is [a core value in the library profession](#), so we thought we could

justify an exception to our practice. On the other hand, we also value respect for other cultures; copying a cartoon that would offend Muslim students probably wasn't a good idea. (In fact, David Brooks was quick to point out that many of Charlie's cartoons would be considered hate speech on a college campus.) Also, even though our Facebook page has fewer than a hundred followers, we didn't want to put the library in any jeopardy. Ultimately we settled on highlighting some relevant books from our collection in a subtle affirmation of the freedom of speech. (The next morning on [NPR](#), I was reassured to hear that our internal debate was echoed at news organizations around the world.)

What does freedom of expression mean in my work as a librarian? The library has to be a place where the people who use it can take this right for granted. To that end, the team of library faculty and classified staff work to make the library a welcoming environment for all the students, faculty, and staff of the college and to protect the privacy of our patrons so that they feel free to borrow or access whatever information interests them. At the reference desk, I try to treat each person and his or her question with respect. When selecting books, I look for materials on both sides of controversial topics, and I'm especially careful when it's a subject I have a strong opinion about! In my library research class I do the same.

Of course, freedom of expression is not a value unique to librarians. You don't need me to go on and on about the [Bill of Rights](#) or the U.N.'s [Universal Declaration of Human Rights](#). Since last week, though, I've been thinking about my colleagues across campus who might also consider it core to their discipline. Where would astronomy be, for example, if the Catholic Church had succeeded in stifling Galileo's ideas? Or biology if Darwin had been suppressed? What if the impressionists hadn't been able to find a place outside the Salon de Paris to exhibit their controversial paintings? In fact, freedom of speech, a right I tend to take for granted, is fundamental to teaching and learning. It's at the heart of what we do in sharing and building knowledge. In a [post worth reading on the power of words](#) barmerding quotes Wittgenstein: "the outermost edge of language is the outermost edge of expressible thought; whatever falls on the other side of that edge

is nonsense.” If Wittgenstein is right, do societies that restrict speech even constrain the power of thought?

The library is more than a repository of knowledge. At its best it extends “the outermost edge of expressible thought.”

Image source: [http://commons.wikimedia.org/wiki/File:Constitution\\_We\\_the\\_People.jpg](http://commons.wikimedia.org/wiki/File:Constitution_We_the_People.jpg)

**Week 3: January 25, 2015**

### [Alive and Well in the Information Age](#)



“Do we really still need libraries now that everything is on the internet?” People sometimes ask me this when they find out I’m a librarian. My elevator comeback is “The U.S. actually has more libraries than McDonalds! We offer vetted information that doesn’t exist on Google, and we teach people how to use it!”

Here’s what I say if my listener has more time.

Last year an average of 1300 people a day walked through our library’s front door. I would guess that most of them took the library for granted as a vital part of their college lives – whether they were borrowing a textbook from the reserve desk, conferring with a librarian about how to find peer-reviewed journal articles on e. coli, or just looking for a quiet place to study, but the question comes up often enough for me that it’s worth pondering. Why does a community college need a library?

Ten years ago when I was giving a tour of the library, I could ask, “What’s the first think you think of when you think of a library?” and reliably expect a chorus of “Books!” Books were our brand. Now, in the information age, libraries are first and foremost about information in whatever format our patrons need it. We acquire the information they need and make it accessible. This sounds straightforward, but a complex (and let’s face it, expensive) infrastructure is required to make that happen, so why bother if everything students need is on the internet? Well, for one thing, *not everything* is on the internet — or at least not for free. Let’s say you want to read this morning’s article about Tamir Rice in the *New York Times*. Oops, sorry, you’ve already enjoyed this month’s allotment of ten free articles, but log in to LexisNexis on the library website and get it at no cost. Equity in action.

On the other hand, a lot of information *is* freely available on the internet. What I often hear from students, though, is that they feel overwhelmed when they search Google and have a hard time finding exactly what they want. The library helps solve this problem in a couple ways. First, the library functions as a gatekeeper. If Google has quantity, the library offers quality. For instance, try a subject search in the library catalog for police brutality. Instead of twelve million hits on Google, you’ll find eight highly relevant books that were either

recommended by an instructor on campus or selected by a librarian, usually after reading at least one book review. Second, we know how to get to the good stuff (even on the internet!), and we like showing students how to do this. A friend recently compared searching the internet to looking for eggs on a farm with free-



range chickens. Someone like me could hunt all day before I filled my basket with eggs, but the farmer knows exactly where the hens like to lay and can collect them in no time. In the library we give you a map to the eggs or even take you on a guided tour of the farm!

**Week 4: February 1, 2015**

### [The Library As a Third Place](#)

Before the library moved into our temporary facility (while the “old” library is renovated), a student used to come in every morning and pace up and down the library stacks. To be honest, I was a little worried about him and finally asked if he was okay. Yes, he assured me; walking around the library just helped him to think.

I get it. When I’ve sat at my desk in front of the computer for too long, I find it very soothing to wander through the stacks, where the world’s great stories and centuries of knowledge are bound in books, silently inspiring reflection and restoring my sense of why I’m here. Even after many years working in libraries, this is still a special place for me. But I’m a library nerd. That’s to be expected. What about most people?

In 2011, more than three thousand students at five California community colleges filled out [a library and technology survey](#). Although this was only a pilot, it’s interesting to look at the key findings. Among them:

- “Library as place was a central theme among participants, who consistently expressed the desire for longer hours, larger facilities, and more resources.
- Respondents frequently cited the quiet, clean atmosphere of the campus library facilities as conducive to academic productivity, often in contrast to their home environments.”

That phrase “often in contrast to their home environments” grabs at my heart. I may have a grand image of the library as the heart of the college and a temple of knowledge, but for some of our students the allure may be just a practical matter of finding a study carrel where they can shut out the rest of the world while they read a chapter in their textbook or start sketching out ideas for their essay due Friday. They come for the quiet or alternatively to meet up with classmates in a place where they can study or prepare for a group project free from the distractions at home. Yes, the library is first and



foremost about providing information, but we also offer a “third place.” Ray Oldenburg coined this term in his book *The Great Good Place* to describe public spaces apart from home and work where people like to hang out. Such a space “is remarkably similar to a good home,” he wrote, “in the psychological comfort and support that it extends” (quoted in [Encyclopedia of International Media and Communications](#)).

Three years ago a group of students, faculty, staff, and administrators gathered to begin planning a renovation of the library. The architects called it a visioning meeting, and my favorite vision to emerge that day was of the library as “the campus living room.” It inspired me to tweak [a line from the CEO of Starbucks](#) for my comeback when people ask me if libraries are still necessary now that everything’s online: *we offer a gathering place where students come together for a sense of community and to discover new things.*

And yet the library is more than a Starbucks with books. Well, for one thing we don’t sell frappuccinos :(, but there IS something special about a place that’s located in the middle of a college campus, where students see thousands of books on the subjects they’re learning about in their classes, and where other students are immersed in their studies. The college library is a third place that’s remarkably conducive to teaching and learning.



**Week 5: February 5, 2015**

## [Can the Library Help Even the Playing Field?](#)

*“Knowledge will forever govern ignorance, and people who mean to be their own governors must arm themselves with the power which knowledge gives.” —*

James Madison

The original *raison d’être* of American libraries was to support democracy by ensuring that all citizens, rich or poor, had the same access to information so they could “arm themselves with the power which knowledge gives.” The freedom to read continued to be important even as librarians’ notions of how best to serve their communities changed. In the 19th century, librarians believed that everyone had an equal right to read and to read for pleasure – but only the highest quality literature, of which the librarians were the arbiters (nothing trashy!). Luckily, American librarians grew out of their prescriptive ways and started offering what people wanted to read and not just what the librarians deemed worthy. In my local public library today I can find my favorite *Her Royal Spyness* mystery novels and DVDs of *Downton Abbey* along with the collected works of Jane Austen.

The purpose of a community college library is a little different from a public library – less about entertainment and more about teaching and learning. Our job is to provide a space, information resources, and information literacy instruction to support the classes taught at our college, but equity of access is still a core principle. We make sure that information is accessible to vision-impaired and distance-learning students (closed-captioned videos, lots of online resources, email reference, an online library class). Our collections reflect the multicultural diversity of our students, and before we moved into our temporary facility, the library was a campus art gallery where we hosted art exhibits for the cultural heritage months. Our reserve book collection provides students with free access to textbooks and calculators, and along with the Media Center and other computer labs on campus, we help bridge the digital divide. So, honestly, when our

college community started to focus on student equity, I thought the library was ahead of the game!

Well, not so fast. Yes, the library has done a great job, but we're talking about a broader goal now. It encompasses the attitude librarians have always had, but asks for more. How can the library help increase course completion rates for African American, Hispanic/Latino, and Filipino/Pacific Islander students?

Most students who use the library value its resources and services, but what about the students who don't find their way to our building or our homepage? A few years ago a random survey of Foothill students regarding awareness of student services revealed that 37.4 % had never heard of or had never used the library. Inspired by the Student Equity Plan, we're exploring ways to expand library outreach specifically to the targeted groups. Collaborating with the First Year Experience pilot being developed by the Student Equity Workgroup offers some interesting possibilities.

One idea is to offer our "Research Paper Search Strategies" class to FYE students who are taking an English class in which they have to write a paper. They would earn a unit of credit for learning how to do the research they need for their English paper that quarter and hopefully pick up some lifelong skills in finding and evaluating information. Another idea I'm excited about was suggested by my colleague Micaela Agyare: a personal librarian service. We're not sure exactly what this would look like or how staff-intensive it would be, but the FYE pilot gives us a great opportunity to test it out. Each student in the program would be paired with a librarian who would offer support throughout the year. The connection could be as simple as a series of well-timed emails (Week 1: "The library is a great place to study." Week 6: "Need to write a research paper? I can help!" Week 10: "Wondering how to write a works cited page? I'll show you how!"). I would love to have a brown-bag lunch or pizza party where students could meet their librarian in person. Maybe this would lead to one-on-one research coaching sessions. Who knows? The goal would be to give disadvantaged students who don't know about the library or may not feel comfortable there a caring human connection to draw them in – a step in leveling the playing field.



**Week 6: February 15, 2015**

### [Freedom of Speech and the Gideon Bible](#)

One day last week a student reported to the checkout desk that someone was handing out Bibles outside the library. Sure enough, two gentlemen stood near our entrance offering a pocket-sized Gideon New Testament to every student who walked by. Now I don't have anything against the Bible, but it felt disconcerting, like the library itself was somehow advocating a particular religious belief. Did these men even have permission to be here? In fact, they didn't need it because – yes, you got it– they were simply exercising their freedom of speech. As I learned from the Office of Student Activities, anyone can share information anywhere on campus as long as they don't disrupt a classroom. If an organization is asking for money, it's a different story; they need permission from the college and can be restricted to a specific location, but military recruiters, environmental groups, and Gideons can distribute promotional literature wherever they like, including the doorway of the library.

That afternoon I noticed several presumably unwanted Gideon Bibles lying around the library. That really did look like we were proselytizing, so I started to gather them up. This became sort of like a game of Where's Waldo? I found them on stools, in the corners of study carrels, and even tucked behind books in the stacks. But then what was I supposed to do with them? They're Bibles! I couldn't throw them away! As I

pondered this dilemma and reached for two more copies, a student handed me yet another. She'd been faced with the same dilemma and apologized for passing the problem onto me. "I don't want it," she said, "but I didn't feel like explaining my beliefs to them, so I just took it." We talked for a few minutes, and when she confirmed what I'd feared, that the experience had made her uncomfortable, I empathized with her feeling, but explained that freedom of speech gave them the right to be here. She accepted that.

A few weeks ago I wrote about the library as place, and Falk Cammin's [post last week](#) musing on the differences between the physical space on campus and the virtual space in an online class expanded my thinking beyond the library to the whole campus. "We carve out a space dedicated to teaching and learning," she wrote, "and thereby attribute value to it. For community colleges, it is the State and ultimately the taxpayers that attach enough value to education to fund the creation of a separate space designated solely for the purpose of education." A college campus is a unique space, and in what I would guess is a motherly way (not having kids), part of me wants to protect our students while they're here from intrusions on their learning, and perhaps somewhat selfishly, I also want them to have unfettered access to the library. I remembered Laguna San Ignacio, a lagoon on the Pacific coast of Baja famous for its friendly gray whales. It's also a marine sanctuary, so a *panga* loaded with tourists is not allowed to go right up to the whales, but it can approach within a certain distance, turn off its motor to drift on the water, and wait. If you're lucky, a whale may choose to approach *you*. Couldn't the college have a rule like that?

But what is our job here? In my observation, good mothers try to keep their kids safe, but also raise them ultimately to be independent. Our students are not endangered wildlife; they are adults learning to live in the real world. Our job is not to shield them from discomfort, but to help prepare them to navigate this world in all its complexity, including the challenges and responsibility that comes with a right like free speech.

**Week 7: February 27, 2015**

## [Community](#)

In December we completed our comprehensive program review for the library, and this week I planned to write about the great studies we cited showing the value of academic libraries for student retention. If you're interested, let me know, and I'd be happy to share them with you, but what I've actually been reflecting on is community. Maybe it's because this theme has come up in a variety of ways among the bloggers in the reflective writing challenge.

It's not surprising, of course. As [Barmerding](#) pointed out in his post about community college workforce programs that succeed by tapping into specific needs in the local community, community is in our name! He wrote about how we help students get better jobs at the same time that we help out people in our community by training skilled workers, and that's an elegant win-win, but we meet more than economic needs. Changing hats from faculty member to private citizen, I think about how much Cabrillo College means to my hometown of Santa Cruz. It's where my mom got her degree in library technology and where I had my first experiences of live theater and a planetarium show. My high school graduation took place on the football field, and seeing musicals at the new Crocker Theater is still one of my great pleasures. Like my hometown college, Foothill offers science and cultural events to be enjoyed not just by students, faculty, and staff, but also by the residents of Los Altos. Last month the [Physics Show](#) was sold out; this weekend Foothill presents the Make a Joyful Noise XXVI Annual Gospel Concert as a finale to Black History Month.

So there's the vital connection that we have to the town where the college is located, and then there are webs of connection on campus. Several Foothill bloggers have inspired me with their efforts to create a sense of community in their classrooms, and as a relatively new online instructor I'm paying special attention to the challenges of the online environment. In my first year, I focused on the basics of sharing content in a (hopefully) engaging way, designing assignments that would give students a chance to

develop and practice new skills, and doing my best to create a personal relationship between me and each student. Again, this was pretty basic: I provided prompt and encouraging feedback on assignments, used their names in my comments (even if the comment itself was the same one I repeatedly copied and pasted!), and answered emails right away. The research class I teach is only one unit, so there isn't a lot of room to play with, but I'm experimenting with adding more discussions to the usual introductions the first week. We just finished one in which students got points for sharing a reliable source about the measles epidemic and also for evaluating one of their classmate's sources.

The library is a very different container from a class where students gather on a regular basis for shared activities with a common goal under the guidance of a teacher. Our sense of community is more fluid, but I think students who study and do research here feel camaraderie with the other students who are doing the same thing – even if they're working alone. That's part of what makes the library the campus living room, a comfortable space conducive to learning. Of course we try to enhance that feeling by giving friendly service, providing spots for group work as well as solitary study, and in small ways like offering a jigsaw puzzle to work on as a study break.

I became a librarian for the reasons you might guess – I love books, I have an organized mind, I like helping people – and those qualities definitely make the profession a good match for me, but another part of my job satisfaction is the camaraderie I feel with my colleagues in the library and across campus. Working with smart and interesting people who are committed to teaching and learning is invigorating, inspiring and ... well, fun. Plus, I feel like I belong. When I look at the bronze memorial tree on campus that honors departed employees, I pick out the individual leaves of people I knew and also imagine my name there one day. Even after I'm gone, I hope to remain part of this community.

Which brings me full circle to my original theme for this post. When students also feel like they belong –whether as a library user or part of an engaging and connected class, a sports team, or a program like Puente or First Year Experience – they are more likely

to persist. Creating a sense of community for students is worth doing because it makes it more fun for all of us to be here, but also because it contributes to student retention.





**Week 1:** January 17, 2015

Quell The Fear—Punch Through



This quarter marks the completion of my first year teaching. Happy Anniversary to me! I remember when I walked into my first classroom a year ago, I had no idea what to expect of the students, the faculty and staff, the institution, or myself. I was fresh out of grad school and had never even taught my own course before. Ah, the naïveté of being so green (not to say that I’ve grown out of my naïveté quite yet—after all, I’m still freeway-flying). The only advice I had received prior to this gig was from an old grad school classmate who had been adjuncting for a year: “Don’t do it. I’m miserable,” she lamented over a four-hour coffee date during which she vented about the injustices committed against the adjunct population.

I was teaching in the evening that quarter, so the campus felt deserted—not at all what I had pictured as the first-day-of-school hustle-and-bustle. A classroom full of very surprised faces stared at me, and I attempted to control the waver in my voice and the shaking of my hands while distributing the syllabus. *Mind your posture—chin up,*

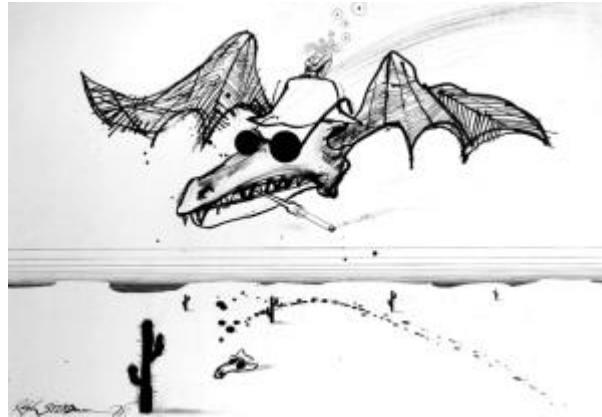
*shoulders back. Speak in a firm, assured voice—don't do the Valley-Girl lilt at the end of sentences! Make eye contact, but not for too long. Let them know you mean business.* It was all a façade, really. For the next twelve weeks, these bright, young minds would be looking to me for answers—answers I probably didn't have. I feared being discovered as a fraud.

Now a year later, I walk into the classroom, and although I feel quite comfortable in my skin, that fear still tugs at my gut—or maybe that's just nerves or indigestion or both, but nonetheless... Just this week, not only was I forty minutes late to class (for the first time!) because of a horrendous traffic jam, but the classroom technology also failed me—of all days! These students had miraculously waited for me, and I couldn't even deliver the PowerPoint (yes, I know, *vintage*) I had planned because the virtual lab wouldn't connect. Alas, I had to lecture using the dry-erase board—old school! But better than chalkboards, at least...

I had to remind myself of a rather wise piece of advice that a fellow part-timer gave me last quarter: “Stop trying to be perfect.” In other words, don't take yourself too seriously. Letting students see the fallible side of you actually helps to quell The Fear not only in yourself, but also in your students. They see that you're only human (I'm trying to silence that Christina Perri song from playing in my head), just like them. We all walk into that classroom harboring some kind of fear—fear of failure, disappointment, rejection, or what-have-you. What are you doing to quell The Fear? Because once you quell that fear, you open up yourself to discover what inspires and motivates you. I'm inspired when I witness students reach that moment of cognitive insight, Gestalt's “aha!” moment, when they punch through and are able to ride the bike on their own, and that motivates me to keep finding ways to support that punch-through. What inspires and motivates you? And how are you motivating your students to inspire themselves?

**Week 2: January 25, 2015**

### Corrupting Young Minds



When I told people I was assigning Hunter S. Thompson's book *Fear and Loathing in Las Vegas* to my freshman composition class, I received many a raised eyebrow—and higher than Dwayne “The Rock” Johnson could arch it. I can see how it appeared, ostensibly, I was corrupting the minds of our youth with a text that featured excessive drug and alcohol abuse, foul and potentially offensive language, extreme violence, nudity (yes, one of Ralph Steadman's illustrations is a male full-frontal) and suggestive sexual content, gambling, kidnapping, driving while under the influence, and countless other instances of recklessness and depravity all in the name of consciousness expansion. A text with such explicit content that has amassed a faithful cult following for what critics have called “glamorization of drugs” ought to be sent home with a parental advisory and permission slip for students under 18.

I had to tread very carefully to connect the text to our discussion about the state of the American Dream. After all, what teachers say in the classroom can be taken by students as The Word, The Truth. We pace in front of the dry erase board or the projector screen, elucidating our reflections on our favorite short stories, novels, plays, and poems, and the students frantically attempt to scribble down every word we speak—these words seem to contain the “hidden meaning” of the text and, more importantly, are the key to earning that coveted A. It still gives me pause as I watch

those pens and pencils bobbing up and down, and I feel self-conscious, even panic. *Oh my, what did I just say?* Well, too late—it's already been recorded in the margins of their textbooks, books that they'll sell back to the bookstore for a couple bucks, books that some other student will buy and read and think, Here's the answer! (When I was in college, one of my poetry professors used to make us write nonsense in the textbook margins for this very reason. "I want everyone to turn to page 157," he commanded, "and write 'secret bird' next to the fourth stanza." Now that I think of it, I should have my students do this, too.)

In essence, we have The Power to affect the thinking of students through the books we assign them to read and through the things we say in class. That potential influence is absolutely terrifying. My high school calculus teacher used to liken the classroom to a democratic dictatorship, and in some ways, it may seem to have some truth. Students have the freedom to attend class (or not), complete assignments (or not), select their own essay prompt, or determine which direction discussions may go; ultimately, however, the instructor has the power to call the final shot.

But even though it may seem, on some levels, that we decide how things go down, or even if we claim that our word is Law in the confines of the classroom, I have to respectfully disagree with my old calc teacher. We assign texts, but it's ultimately up to the student to read them. When discussing Gerald Graff's essay "Hidden Intellectualism," so many students respond by complaining about having to read canonical works like *The Scarlet Letter*. They had absolutely no interest in the book, which was why they rarely read in their high school English courses and instead resorted to Cliff Notes or some such source. So perhaps I was, inadvertently, corrupting our students by assigning *Fear and Loathing*- (hey, it's part of the cult canon—doesn't that count for something?), but I just wanted to capture their interest and get them to read. Read and then think. Think and then talk. Talk and then write. For most of my students, their essay on *Fear and Loathing* was their strongest piece of writing to come out of the term, and many of them also remarked on their evaluations that the unit was their favorite part of the course. One student even approached me to say that he was inspired by Thompson's style of Gonzo journalism and wanted to introduce his work to

the Journalism Club. I realize this philosophy may be a bit idiosyncratic. I realize we can't reach every one, and we can't win every day. But don't take it personal. If you can reach just one every once in a while...

**Week 3: January 31, 2015**

### Who's Keeping Score?



Last summer I participated in a basic skills summit during which my fellow adjuncts and I were trained on Student Success. These terms “Student Success” were not new to me. I first came across them in a prior life, when I had briefly pushed papers on the administration side of things. The president of the university where I worked had just delivered his Strategic Plan, and our unit was charged with spearheading the Student Success Initiative for *the entire university*. No big deal. (Oh yes, you know I’m brushing my shoulders off.) At the time I remember thinking, *how does one define and measure Student Success? What are the metrics for that?* It seemed like a poetic abstraction, a pleasant ring of alliteration.

During last year’s summer summit (hey, that’s alliteration, assonance, and consonance all in one, yeah?! Good thing I didn’t go into poetry...) we were familiarized with the Student Success Scorecard, and I learned the primary metrics for Student Success are “Completion” and “Persistence.” We also spent time reviewing the methodology for

measuring these metrics, and after the summit my main takeaway was this: that the *entire* institution is accountable for ensuring students obtain degrees and/or transfer, that this accountability is a *shared* responsibility among us all, educators and administrators alike.

A couple of weeks ago as I was leaving campus, I bumped into a colleague who asked me to convince one of his students to not drop out of his class. Though the student had never taken a class with me, I had worked with him in the tutoring center over the past year as he successfully made his way all the way through the ESL pathway. I'm not tutoring this term and wondered how I would get in contact with the student. As much as I enjoy being on campus, stalking the tutoring center didn't seem like the most efficient option.

Then, a rather fortuitous thing happened: approaching the parking lot, I saw the student talking to another one of my colleagues in the department. So I joined them, and the other instructor and I tag-teamed it to convince the student to not drop the class. The student was especially concerned about his grade point average and felt sure he wouldn't ace this class, particularly after bombing an in-class essay that day (so he claimed). If he dropped the class, he reasoned, he could get a full refund and perhaps make a second attempt at the class next term.

After a half-an-hour plea, as we roasted under the blazing California winter sun, the student resolved to sleep on it. Later that evening, I was notified by the instructor that the student had emailed, stating he had decided to remain enrolled in the class after all. I know it's just one student, but I mean, who's keeping score, right?

Earlier this week, I happened to run into the student again (what are the chances?) and asked him how his class was going. His response struck me: he was dedicating most of his time to the chance of barely passing this class with a C, while sacrificing time to succeed in his other courses. He said that when he first came to America, he had passion. But now, he didn't feel that *passion* anymore; he just wanted to get an easy A. He was clearly distraught, and I felt torn. Did I set up this student to fail by wrongly encouraging him to remain enrolled in that class?

I shared with him my passion for teaching. Although I love teaching and working with students, not every single day is exploding with passion. Some days can get real tough. But, I told him, keep your end-goal in mind. Remember why you came to America. If you dropped out of this class, you'd be one step further away from your goal. He's one of the hardest working students I've come across—ambitious and extremely meticulous with his work. There was a time when he even asked me for extra essay prompts so he could continue practicing and improving his writing outside of his class assignments. I patted him on the shoulder and hoped my words provided at least a morsel of encouragement. *Persist through these moments and move one step closer to completing your goal.*

**Week 4: February 6, 2015**

### The Magic Zone



I'm looking for The Magic Zone—can you point me in the right direction? Will I know I'm there once I arrive? And if I do find it, how do I ensure I don't wander off and get lost again?

Whenever I attempt to teach students a new concept, I aim to find this Magic Zone—Vygotsky's Zone of Proximal Development—the zone right above where they can reach but not too far beyond their grasp that they shut down. This zone is the magic of teaching. Unfortunately, much to my chagrin, I was not born a magical child—when I was eleven, no owl swooped by to deliver my acceptance into Hogwarts—so, navigating my classes to The Magic Zone has required a bit of finesse and a lot more time teaching in the affective domain.

I used to approach the teaching of critical thinking and logical reasoning with an emphasis, naturally, on the cognitive domain. After all, critical thinking is about using your brain, isn't it?! I drew all these fairly lopsided concentric circles (ovals, really) and Venn Diagrams to visualize deductive arguments, specifically, categorical syllogisms, as I attempted to distinguish between distributed and undistributed terms. I lectured to the dry-erase board:

“Let S represent the Subject or Minor Term and P represent the Predicate or Major Term... blah blah blah... so that if you accept the assumption of the Major Premise that ‘All good citizens are nationalists,’ *and* if you accept the assumption of the Minor Premise that ‘All good citizens are progressives,’ then the conclusion ‘All progressives are nationalists’ would not logically follow because this deductive argument is invalid and commits a syllogistic fallacy, yes?”

I pivoted around, pointing to the circles, asking, “Yes? You see? Does that make sense?” Nope. Furrowed brows. Glazed eyes. The top of a student's head, a deep snore, and a pool of spittle forming on the desk.

I had strayed from The Magic Zone, and we were lost. Psh, who am I kidding... I'm an English instructor—what do I know about teaching philosophy and logic? When I was an undergrad, I had to take Introduction to Logic as a Political Science major, and I remember feeling the same exact way as my students did when my professor drew all those circles on the chalkboard. I was also terribly distracted by the fact that he had two missing fingers on one hand, and I would sit in class imagining the different ways he had lost those fingers. Needless to say, I bombed my first test. Not sure how I squeaked through that semester... so, I empathize.

Anyhow, after my rather pedantic lesson on logical fallacies, one student approached me and was quite concerned. “I don't know how to think critically,” he said. “I don't get anything you went over today, and when we have class discussions, the other kids talk about all this deep stuff they get from the readings, but I don't get any of that when I read.” He was one of the quieter students who never volunteered to speak. At that point in the quarter, he was also not passing the class.



I had to reevaluate. Sometimes, too much focus is placed on a student's motivation to learn, but as instructors, we're also involved in some form of attitude teaching. How could I encourage this student, draw him in? "Well, what do you think the novel is about, then?" I asked him. "I think the author's trying to give us a different side of history, to tell us a story that hasn't been told about his home country and this dictator." None of the more vocal students had interpreted the text that way, so he was afraid his understanding of it was incorrect. I urged him to continue pursuing that line of thought, to consider broadening his analysis of the novel beyond its fictive world and writing a research paper comparing and contrasting this real-life dictator to the author's fictional portrayal. He was all pumped, and we met several times throughout the quarter to ensure his research was on track.

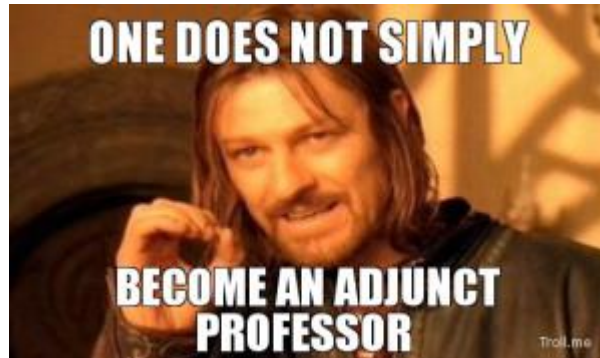
In the end, even though he didn't receive the highest grade in the class—nor was he the strongest writer—he was, by far, the most improved. After the quarter was over, he wrote to me, saying:

"I enjoyed the books you choose for the class, especially Diaz's book. Never in my life have I been much of a reader or at all until recently... Your class has also helped with my life outside the classroom. At work my boss said she has noticed an improvement in my writing... Hopefully one day I achieve my ultimate goal of becoming an educated person."

Of course, I told him he was already an educated person.

**Week 5: February 16, 2015**

### [Adjuncts of the World, Unite!](#)



Next Wednesday, February 25, 2015, will be the first National Adjunct Walkout Day. It was proposed last October by an anonymous adjunct faculty member who teaches writing at San Jose State University. She cited concerns about employment issues, including job security, pay, benefits, institutional support, and the impact that adjunct teaching conditions may have on student success. Furthermore, some states and unions even prohibit members from striking.

I remember my very first exposure to strikes was when I was in either kindergarten or first grade. My aunt was a special education teacher at a public school, and she went on strike with the other teachers in the district. As such, she pulled my brothers and me out of class as fresh recruits for the picket lines. We made signs and marched in circles and chanted—what we chanted, I can't recall. Although we were stoked to miss school, we got bored and fatigued relatively quickly. I don't remember what the outcome of the strike was. When I returned to school, I learned I was the only student in my class who was absent during the strike, and all of my classmates looked at me askance.

Now as an adjunct myself, I've yet to decide how I'll participate in National Adjunct Walkout Day in a week and a half. When I had heard about the movement, the first thing I thought was, *If I walk out, what about my students? I'd be doing a disservice to them!* After all, my students and their success are my primary concern. I quickly referred to my syllabus to see what was on the schedule (yes, I'm one of those instructors who

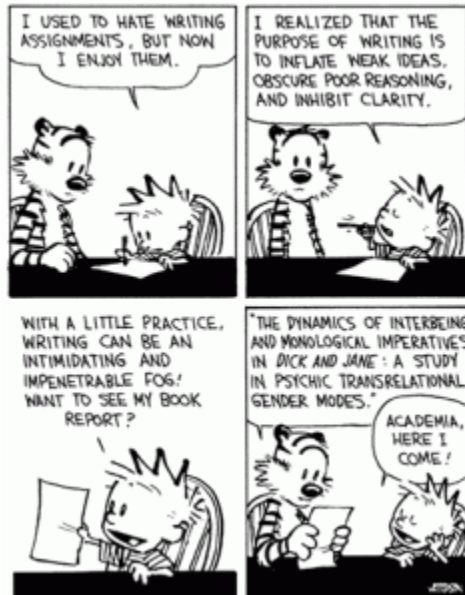
plan out my entire term, down to every single class meeting). For my students on the quarter system, we'd be in Week Eight of classes and in the midst of discussing a very important part of a rather complex novel with multiple layers of meaning. For my semester students, we'd be in Week Five, a time when I'm still scaffolding instruction on evaluating and making logical inferences from the text as well as assessing the impact of literary devices.

But a walkout isn't the only way to pledge support. There are also grade-ins. For this, adjuncts meet at a central location on campus to hold office hours and work in order to highlight how adjuncts sometimes don't have their own designated office space. Another alternative to walking out is to take the day as an opportunity to expand awareness. Adjunct can wear paraphernalia, such as T-shirts, that identifies them as such. Furthermore, the idea of a teach-in is also quite attractive. Instead of walking out, adjuncts can spend class time discussing adjunct faculty concerns with their students. As a means of authentic assessment, students can be encouraged to write a letter of civic engagement or even post their support on social media.

Regardless of where I'll be or what I'll be doing on Wednesday, February 25, 2015, it'll be interesting to track the developments leading up to and following this movement.

Week 6: February 22, 2015

## I'm a Survivor



The other day as I was commuting to class, I was listening to NPR and heard a [Perspective](#) from a young man who shared his experience as a student with auditory processing issues. He discussed his struggle with standardized test-taking, during which he was unable to repeat back instructions to work out the math problems in the test booklet, as there was no talking “allowed.” Unfortunately, he did not pass the exam that day.

This Perspective made me think of two things:

- 1) How are we addressing the learning needs of students to increase accessibility?
- 2) How do we authentically assess student learning?

One of my students also has APD. When I was informed of such, I had no idea how to address this issue. I had no formal training on teaching students with learning disabilities, and I didn’t even know, exactly, what APD was. I Googled it and read about what I could do in the classroom to meet the student’s learning needs. Ask the student—this one usually sits in the back row of class—to sit in the front instead. Read

anything written on the board aloud. Ensure any audio or video clips played in class have captions. When meeting one-on-one, ask the student to repeat back what you've said. This requires me to be much more conscientious, which is actually a great thing, though I often worry I'm not doing enough, and that if the student doesn't do well, it's because of my inadequacy as an instructor.

To address the second point, I'd like to quote the young man from the NPR Perspective: "You know you've learned something when you can show that you can use it." My primary mode of assessment in my English courses is the argumentative essay. At this very moment, I'm actually taking a much-needed break (even though my students hounded me all last week about getting their essays back) from grading a fat stack of personal reflections about reading, writing, and critical thinking. Many students have mentioned how much they loathe having to write essays and see no practical use for them. One student admits, "Honestly, writing... essays was more frustrating than fun." Another student claims, "Writing a paper did not seem like much of a survival skill."

This is not the first time I've heard these kinds of complaints. It's futile to plead with them about how they're developing skills of sustained attention, introspection, and articulation, which will serve them well later on in life. Are there more "fun," real-life tasks related to literary criticism that students can complete to demonstrate they've met the course's learning objectives? I've even posed the following challenge to my students: If you can find another way for me to assess your learning, besides writing essays, bring it on! No one has taken me up on this, yet.

**Week 7: March 2, 2015**

### [Upon Becoming a Student Again](#)

A few days ago, I took a computerized placement test for English. The rationale was that as an instructor, I should be aware of how students are being assessed when they enroll in an English course. It's been at least seven years since I've taken a



standardized test, and I've never been very good at it. When I was in high school, I took the SATs twice and only improved my score by a mere twenty points the second try. After college, I took the LSATs twice and earned the same exact score both times!

Going into the placement test last Friday, I was a bit nervous. What if I placed into developmental

English? I hadn't prepared for the test and went into it cold, as many students do (so I'm told by the staff at the testing center). Nothing like having the full experience! Once the test began, I was extremely distracted during the reading comprehension section of the test. The testing room was too quiet. I had a hard time concentrating on reading the computer screen. Back when I took standardized tests, most of them were still on paper, and when I grade essays now, I still work off of a printed hard copy. I had to read many of the test questions and possible answers several times and still couldn't figure out what the best choice was. Sometimes I just guessed and knew I selected the wrong answer because the next question was, all of a sudden, easier. Clearly, the adaptive test was smarter than I was. When it came to the sentence structure section of the test, I found it frustrating that I could not read the test questions out loud. I've been trained since elementary school to determine whether a sentence is grammatically correct by "listening" to it being read aloud, and I even advise my students to proofread their own writing using this technique. Unfortunately, this approach is not permitted in the test-taking environment.

But the most notable part of the experience was the essay portion. I usually assign an in-class diagnostic essay on the first day of class every term and give my students a mere hour to pound out a hand-written compare and contrast essay with a counter-argument, refutation, and concession. And here I was, completely unprepared to write an on-the-spot essay (I thought the test was only multiple choice). Hey, at least I had the opportunity to type my essay. Still, I struggled to come up with specific examples to support my points, made a bunch of horribly vague assertions—stuff I usually ding my

students for doing—and rushed to finish because I was ten minutes late for a meeting with a student.

In the end, I did all right (whew!), but the experience definitely helps me to empathize with students even more. I'm tough on them because I want to challenge them to excel, to help them achieve things they didn't think they were capable of. But it's always good to step back and put things in perspective, to become the student again.

**Week 1:** January 28, 2015

**The Homeschooling Kid Goes to College**



A few quarters back I thought like most traditionally educated people when it came to the idea of homeschooling. I had no exposure to it growing up as I was educated in traditional, public, comprehensive schools and received both my undergraduate and graduate degrees from public universities. It wasn't until I was well into my career as a psychology instructor that I met a

very unique young lady in one of my General Psychology classes who had been homeschooled her entire life, that I begin to think differently about the concept of educating children at home.

The reasons why this student made such an impact on me were many, but what stood out to me most was how advanced her thought processes were. It turns out that she was the only child of two successful journalists who had a high level of education themselves. I'm always asking my students for input and for their perspective on topics we cover in class, and this young lady's perspectives always seemed more advanced than the others. It wasn't just an aptitude thing, either. Instead, it was as if she had lived a longer life than my other students. The impressive thing about this was that she was only sixteen years old!

I found myself wondering how a sixteen year old with what should be "limited life experience" was doing with so much knowledge, experience and an insatiable desire to learn. It seemed so foreign to me. She was very different than even the other Middle College (a program on campus that allows high school juniors and seniors to take college classes while taking high school classes) and concurrent enrollment students. These students usually are mature beyond their years. Even so, this homeschool



student seemed like she was cut from an even different cloth than these already atypical students. I began to feel compelled to learn more about her and her educational background. This led me down the path to rethinking everything I knew about learning, education and school.

It is important to understand that there is no one size, fits all approach to education. I think that pretty much everyone is aware of that, including our elected officials, but I think that very few have actually dug deep enough into the subject to understand the many different strategies that are available to us and our students. I work in a department with three other amazing full-time faculty members who all share my love and passion for the subject of psychology. How we came to the field and our interests within it, vary greatly. Therefore I see how different professionals can all get to the same destination via very different paths.

I liken educational method selection to choosing an investment allocation strategy. Most experienced financial advisors will sit down with their clients and discuss risk tolerance and investment timeline to determine the proper asset allocation for their clients. This in itself isn't a bad practice, but what they tend to do next, severely limits financial outcomes for most people. What these individuals tend to do is take what they learned from their clients and plug that information to what they've been taught as it relates to asset allocation. Usually this produces some sort of blend of US stock, US Bond and foreign stock mutual funds. They figure with this broad diversification, most people will have solid long term returns with minimal risk (of course that is based on their allocation to fixed income versus equity funds). The issue here is that you still have only one or two kinds of assets...stocks and bonds. There are literally thousands of other asset types to consider, not the least of which are private businesses, real estate, precious metals, commodities, etc., in which the client may have some sort of affinity for. They may never get the chance to explore those investment options as they have never been made aware of their existence.

The point is that even the most educated and trained professionals don't always understand there are multiple approaches to education and learning that differ from the

traditional. Next time we will discuss how to start building the optimal learning system and/or environment.

**Week 2: January 28, 2015**

## [What is the Perfect Learning Environment?](#)



In my [previous post](#) about the homeschooling kid who went to college, I discussed how my views on teaching and education were altered greatly when I met an amazing homeschooled student in my general psychology class. Every quarter since I have asked my students about their educational backgrounds. The majority of my students went to traditional, comprehensive high schools. Some

graduated from local private schools and some had a combination of private and public school growing up. The minority come from non-traditional education backgrounds such as Montessori, Waldorf and of course, homeschooling. At our college, we have a large international student population, which is a whole other conversation. Included in this group are those who attended International Schools and Progressive/Democratic schools.

Being an instructor of classes like Child and Adolescent Psychology, I get to dig deep with my students on their own educational experiences growing up and how this has impacted their learning. My wife and I have a daughter who is currently 1.5 and we are like most parents in that we want what's best for our daughter. The fact that I am a dad and that I teach classes like Child and Adolescent Psychology, I have a huge interest in understanding what the best educational system is for learning and for a lifetime of happiness and success. At first we equated a school's high test scores to being a "good" school in our search for the perfect home/community to raise our daughter. Upon more research, I began to understand this was not always a great measure of a school.

I have many students in my classes who graduated from high achieving schools with high test scores, but it has become clear to me that a great school and high tests scores are not necessarily linked. Standardized test scores measure only one aspect of learning and do a poor job of assessing things like critical thinking skills, creativity, passion for learning and even qualities like leadership, open-mindedness and kindness. All of these potential outcomes are just as important or more so than memorization, which standardized tests can measure quite well. Considering the fact that there are so many different public/charter, private and alternative school options, which method is best and how does one choose the best option for themselves or their children?

The proper educational system selection process has to begin with something I call a resource inventory. This means that every individual needs to understand their strengths, their limiters, what environments they tend to thrive in and what resources they have available to them at any given stage of life. The good news here is that money is not the number one thing needed to get this right. It can certainly help, but that are many other factors than how deep your pockets are.

To begin the process of designing the optimal learning environment and the perfect educational system for long-term success, we need to ask ourselves where we want to end up? What is the outcome that we desire for us and/or our children? Getting into Stanford is not an outcome. It is (or at least could be) another step on the path towards the ultimate outcome, but getting into Stanford in itself is not a guarantee of anything in life.

Instead, you need to start with your conclusion and work backwards from there. An example might be “I want to be financially independent by my 40th birthday, so that I can travel the world with my children and work on projects that give me both self-satisfaction and a sense that I am making a difference in the world. I’m okay working a job I don’t necessarily love in order to achieve this long-term goal”.

Once we have this information, we can start to better understand the skill set and knowledge required to achieve this learning outcome. Things like budgeting, investment, lifelong learning, earning power and parenting skills need to be addressed,

which comprehensive schools usually do not provide. Knowing the destination will allow us to combine our resource inventory and this well thought out outcome to decide which learning strategy and environment best serves our student of interest.

We'll learn more about these different tools and strategies, and why community college plays a huge role in this process next time.

**Week 3: January 28, 2015**

### [Unschooling, Homeschooling and Compulsory Education Models: A Psychology Professor's Point of View](#)



There is a growing trend in the United States to treat the word “school” as a dirty word. In fact, many homeschooling parents refer to themselves as “home educators” because of their disdain for the word “school”. If you think homeschooling is extreme, you will be blown away by unschooling, which is growing in popularity across our country. At first glance

the theories of unschooling can be quite intriguing and even tempting to consider. How does unschooling fit into the homeschool and compulsory education debate for long-term student success? As a professional educator and professor of child developmental psychology, here is my perspective of the pros and cons of the unschooling movement.

If you are unfamiliar with the term “unschooling,” a description of the term would include phrases such as “learner lead,” “natural experiences,” “schools kill creativity,” “learning is voluntary” and “there are no teachers, only guides”. In my teaching and experience working with children, I know that many of the philosophies and opinions of the unschooling movement are sound. I know that extrinsic motivation will never rival intrinsic motivation when it comes to generating student interest for a subject.

For all my academic achievement, I was once an unmotivated student that questioned the reasoning behind my own compulsory K-12 education. I also know that many a student is lost in this model and we, as a society, and us, as professional educators, need to do better.

I also know that leaving a child's educational and life path to their own interests can be a dangerous risk.

If you were to research Democratic schools such Sudbury Valley School in Framingham, Massachusetts, you would learn about a school that attempts to replicate the unschooling philosophy within a traditional brick and mortar institution. There are no proper classes and only minimal organization throughout the day. The rest of the time the students are left to pursue the activities they enjoy. If their day is spent reading or socializing with friends, fine. If their day is spent playing video games, that is fine, too.

The point in both the unschooling and democratic school is to let the child lead and the adults are there to support the child's learning by acting as "guides" or "mentors" but never teachers. I for one have several mentors in my life and I know that the line between mentor and teacher is often blurred. Many times I look to these mentors for actionable advice and direction, which would technically be a no-no in the unschooling world.

Of course I am painting with broad strokes and summarizing thousands of people's differing opinions on a subject with a few basic statements. This lack of detailed understanding is a huge part of the problem with the unschooling movement. There is no one single approach that can be quantified and therefore researched by the psychological community.

Most unschooling families fall under the homeschooling umbrella. This is a major issue because depending on the state that you live in, you may have more or less restrictions placed on you to meet certain educational expectations and outcomes.

States like Texas, Idaho, Iowa, Missouri, Illinois and Michigan have no requirements for parents to report to the state on anything that their children are doing as

“homeschoolers” or “unschoolers”. Dayna Martin gained mass popularity when she and her family appeared on ABC’s Wife Swap where many viewers learned about unschooling for the first time. She famously discussed that her daughter learned how to read at age twelve so that she could text with her friends. This fits with the unschooling logic that the student will learn something when they are ready to learn it.

It is very challenging as a psychology professional to ascertain the lifelong benefit of purely student lead learning versus the potential detriment of not knowing how to read until twelve years old. The Martin family appears to be an outlier and that there are many other families that are blending the two philosophies of unschooling and homeschooling more effectively.

My opinion on the topic can be boiled down to one interaction I had in my class last quarter. I had my students perform a presentation and lead a discussion on democratic schools and unschooling in my Developmental Psychology class. I have never seen students take sides and debate a topic in such a healthy, passionate way. These concepts hit them hard and they took double the time I originally allocated for the discussion. We spoke for forty minutes on the issue as a group.

At the end, we had some students who were excited about trying this option with their own children one day and others who were less interested. After all of this rich dialogue concluded, I asked them a very simple question.

“Aren’t you all glad you came to class today?”

Everyone said “yes” and that it was one of the best classroom discussions they ever had.

And next came an epiphany for many. If they never **attended college** and never needed to take a **general education** class and I never **assigned** them this project, they would have likely never learned about this educational style.

**They would have missed that learning experience because they would likely never know to look for it.**

Instead my students had an experienced, professional teacher there to add depth and insight into their lives. For me, the community college model is the best option for most people. Why that is the case and how we can begin to harness that educational environment better is the next topic of interest for me.

**Week 4: February 1, 2015**

### Motivation Styles and Learning Outcomes



Many years ago I worked in a mental health facility where one of our primary responsibilities was to control the patients that we were working with for our safety and theirs. We employed behavioral modification techniques in order to see more positive outcomes in behavior. We even implemented a “token economy” in order to further gain control of the

often unruly patients.

If you aren't familiar with a token economy, it is a behavioral modification system that creates an external rewards system for individuals, usually awarding points or a “token” to isolate and quantify desired behaviors. The system worked extremely well within the walls of the mental health facility. It allowed the patients to work on “desired” behaviors which allowed staff to have more control of the individuals within the group. When staffing is sometimes 10 patients to 1 staff member, you need systems like these to keep everyone safe, at least most of the time.

The biggest negative of these token economies is that while they work quite well within the institution or facility in which they are used, they do not lead to long-term behavioral change once the token economy is removed. In other words, once the patient is transferred to a different facility with a different system or they are released, the new environment does not reward the same behaviors with the same consistency, if at all.

Most of the desired behaviors are lost as the individual was relying on an external reward system that they never internalized. This system is used in prisons and in educational environments all over the country. Getting a gold star or a voucher for candy in the school store is an example of an externally rewarding token economy. Even awarding a small amount of points in a college class for completing a homework assignment could be considered such a behavioral modification method.

**The number one factor to long-term student and career success is intrinsic motivation versus extrinsic motivation.**

Many an outstanding athlete, violinist and academic have been created using external behavioral modification tactics. Many parents swear that rewarding and/or punishing certain behaviors was the key to their child's success.

History is loaded with phenoms with extraordinary talents disappearing from their respective scenes. They grew up and woke up to the fact they had been strategically manipulated to perform tasks a certain way via these behavioral modification techniques.

To the contrary, many long-term success stories begin with an area of interest stoked by curiosity plus a mentor who sparked the passion within the student.

I know that extrinsic motivators work—I've seen it. I also know that extrinsic motivation is short-lived and does not foster a long-term passion for learning. Instead, these tactics often lead to burnout and rejection of the incentivized learning or desired outcome.

How do you create a classroom culture of intrinsically motivated students? My number one goal when I teach psychology is to make the topic come to life for each student. I strive to inspire interest and intrigue. I'm animated and excited during my classes because I want my students to see how amazing this field of interest really is. I seek to create intrinsic motivation to learn by tying concepts back to my students' lives so that they can relate best to the material.

I do not rely on extrinsic motivators because my students are intrinsically motivated to learn the material on their own. Students come to class excited to learn and cannot wait



to engage with their peers when class is over to dialogue about the material we have learned. I know I am lucky teaching psychology as it is the foundation of so much in our lives but I also know other instructors in other departments who deploy similar teach techniques and have similar outcomes of intrinsic motivation with their students.

My point is that it takes a lot for learners to become intrinsically motivated. If you can harness this concept as an instructor, you will not have classroom management issues or disengaged students. Each student will understand that a missed class could mean a missed opportunity to become a better person not just missed points towards their final grade.

**Week 5: February 14, 2015**

**Classroom Management: Become a true leader in your classroom with these actionable strategies (Part 1 of 3)**



What is a leader? We've all had effective and ineffective "leaders" in our lives, but sometimes it's challenging to isolate the traits of a truly great leader.

Some are born leaders and never struggle with the role of being in charge. However, most need to learn the skills to effectively

lead a group towards a common goal.

Because the roles are often lumped together, we need to distinguish the difference between a **leader** and a **manager**.

A **manager** organizes by:



- taking charge of the group's schedule
- following through on the tasks of the group

The **leader** has the much larger and higher order role of:

- providing vision for group
- understanding the group's direction
- creating goals and objectives for group



Generally speaking it is easier to find a manager than it is a leader. It is also easier to train managerial skills than the leadership behaviors needed to influence a group of individuals to achieve a common goal.

Great leaders have the necessary leadership abilities detailed above and either develop the management skills listed or outsource them to a professional manager.

Think of how a successful business like Apple worked under Steve Jobs' tenure. Jobs was the innovative leader who clearly set the vision of the company including goals and objectives, but hired effective managers (general and project) to implement his vision for the group. This allowed Jobs to focus on what he was great—inspiring groundbreaking innovation instead of being bogged down with the day-to-day issues of running an organization as large as Apple.

**As a college instructor**, I do not have the option to hire a manager so that I can focus on pure leadership, but I can utilize various technologies to aid me in this process. Utilizing things like a course management system that details deadlines and assignments for students, allows me the ability to focus on what I do best, which is lead.

To be an effective instructor you need to establish the vision and culture of your classes like Jobs did with Apple. Let's detail some of the strategies you can employ to truly master leadership within your classroom.

### **You are an appointed leader!**

Most of the time we need to prove ourselves worthy enough to be a leader. On sports teams there is usually a period of a few weeks in the preseason that leaders "emerge"

and they are then rewarded with captain positions on the team by their coaches or peers. This is called being an emergent leader, which takes a tremendous amount of hard work and persuasion to pull off.

As an instructor or teacher, **you already have an assigned or “appointed” role**. In other words, you are given instant credibility from day one in your leadership status within the classroom. There is no “proving yourself” period, as much as you may believe there is.

Instead, many teachers feel they need to prove themselves to the group and do not realize it’s actually pretty difficult to lose credibility with a classroom of students. Knowing that having leader “stamped” on your forehead when you walk into the classroom **should take some of the pressure off** so that you can focus on your strong suits. This may seem simple, but for many, this is a concept of social psychology that needs to be capitalized on more often.

In the next part of this series, we will discuss the factors associated with becoming a leader. Most people think leaders are born, but we’ll find that this isn’t always the case.

**Week 6: February 15, 2015**

**[Classroom Management: Become a true leader in your classroom with these actionable strategies \(Part 2 of 3\)](#)**



**Leaders are born, are made, sometimes lead and sometimes follow**

I am a leader. I have a vision for every class I teach and my students follow my direction. However, I have not always been a leader. So if I haven’t always been a leader, how did I get the skills

necessary to lead groups with over 50 students?

Well, some people are leaders in every situation they find themselves in. We call this the **trait approach** of leadership. We all know that kid from elementary school that was the “born leader.” These people do exist, but there are less of them than you might think.

Most leaders learned to lead via the **behavioral approach of leadership development**. Can leadership be taught? You better believe it! Most leaders are not born, instead they are given leadership opportunities and taught leadership skills in school, on the field and/or on the job.

We know children who were tall and/or old for their grade are given more opportunities to lead as children. When these kids grow up, they are more likely to be given leadership positions in high school, college and in their early careers. I am a prime example of this as I was both tall and old for my grade.

Teachers and coaches looked to me as the physically and developmentally advanced student when assigning leadership positions more often than my shorter and younger classmates. In fact, many times I was told that I had a different set of expectations due to my athletic abilities and social influences. You can learn more about this phenomenon by reading Malcolm Gladwell’s book, [Outliers](#).

The **situational approach of leadership development** realizes that not everyone is going to be a leader in every situation, but that some situations bring the leader out of us. Personally, I paired the learned principles of leadership from my youth with my current situation as a college instructor (appointed the leader). This combination allows me to feel confident in leading my group of college students.

Not every situation warrants you being a leader in life outside of your role in academia. Sometimes the best leaders feel empowered to lead, and other times are perfectly okay taking a “follower” role. Many teachers may never be leaders outside their classrooms, but because the situation calls for it and they have been appointed their leadership position, they step up and are leaders within that one very specific environment. Within the classroom I know instructors **need** to be their best selves as leaders, so that’s what I do.

Our next installment will address the action steps needed to effectively lead within the classroom. We've already learned that leadership development needs several factors to take place. The exciting part is that there are real, actionable steps that can be employed today to perfect your own style. Make sure you get your notepad ready for this one, because it's going to be loaded with actionable recommendations!

**Week 7: February 24, 2015**

**[Classroom Management: Become a true leader in your classroom with these actionable strategies \(Part 3 of 3\)](#)**

**Leaders make the pursuit of excellence a primary goal**

To be a truly amazing leader in the classroom, one must make excellence a clear goal for the group from the onset. Convincing the group that your actions will “transform” their lives is absolutely critical in establishing unquestioned

leadership. In other words, as leaders we have to acknowledge the value you will create to get students' attention and dedication.

If we expect to get buy in, we need to create a unique experience or selling proposition for them to go “all in” with our leadership and vision. Here are some strategies you can use to get there with your group:

- **Why is your vision compelling?** It's is not easy for everyone to convince people that you are worth following and that what you say matters. From the beginning of your time in front of your class you need to be “selling” your vision for the class. What is your vision? How is it going to benefit them in their lives?



Why does what you are teaching matter to them, especially considering that most of them are still teenagers and they probably don't care about the same things you do. **Where are you taking the group?**

- **Be an inspired communicator:** Great leaders know how to capture a room's attention. They must instill pride in their members and pump up morale to keep the group engaged. **Fun, interesting lectures and activities are the key here.** The textbook can be leaned upon to cover breadth of material, but your job is to inspire and create a desire to learn. I use my precious time with my students to show how exciting the subject of psychology is to learn. **Don't waste your time in class on anything that isn't inspiring!**
- **Draw it back to reality:** Why does this information matter and how can I use it? I **always** bring the information learned in class back to my students and how they can use it in their lives. They understand that my class is unique and that if they miss a class, they may miss something that could change their lives! They understand that it is rare to find a teacher as committed to their learning, so they trust my leadership.
- **Individualized support and attention:** Make it a point to learn every one of your students' names as quickly as possible. When you have a student who is clearly paying attention, but who never participates, bring them into the discussion. Many times these students are introverted or they have been taught to sit quietly in class, passively listening. Either way, they usually have great insights for the class, and you're taking the time to call on them, **by name**, will often create a loyal follower. Use breaks in class to randomly engage students in "get to know you" discussions. You'll be surprised how often students are excited to speak with their instructor about the material covered in class. At the very least this will make an individual in a class as large as fifty students feel connected to their instructor.
- **Be demanding, but always promote of self-efficacy and build esteem:** Early on in my career I was too nice. I wanted to protect students' egos and be the "popular" teacher that all the students liked. It wasn't until much later in my career that I realized that students like demanding teachers. They respect instructors

that care enough about them to challenge them. I read up on **authoritative** leadership techniques and began to understand that rules, order and high expectations were the key to student success. When you combine these qualities with a naturally caring instructor who wants to see students succeed by developing their abilities and confidences, you will be providing a world-class educational experience to your students. Any time you are world class at anything, you will get your loyal followers!

- **When to alter your leadership style:** Not everyone wants to be led the same way. It is not a one-size fits all solution. You need to be aware of the different qualities of leadership that are expected by different groups.
- **Age and academic level:** Generally, the younger the group and the less in depth the course, the more participatory and interactive your classroom needs to become. In other words, lower division general education classes do very well when the leader provides an environment where students feel connected, engaged and that the experience is a fun one. Group projects and activities are important to lean upon here. More mature groups of upper division students tend to look to leaders who demand a bit more respect and provide more detailed management techniques. These students are looking for someone to teach them advanced concepts and they expect a well-planned curriculum that will add to their depth of knowledge on the subject. Being too democratic here could backfire, so you want to acknowledge your leadership position and respect your new autocratic role.
- **Nationality of students:** You may or may not have a large percentage of your students from foreign countries. You should want to know what sort of leadership style is most prevalent in your students' home countries and adjust your style accordingly. For example, I have had a large population of students from a certain geographic area who do not respond well to democratic leaders and look for instructors who more closely resemble their autocratic teachers from back home. Others may welcome the change and may love your style, which they never knew existed but acknowledging the difference and working with students to find the balance is key.

- **Type of class you teach:** Some classes are inherently social and others are more individualistic. It is harder to do calculus while chatting with your friends, but a communications class could be naturally socially interactive. Because group cohesion can be so important in some class types, it is necessary to be more democratic and open-minded in your leadership style while leading more “social” classes. Classes where the individual’s effort is more important, require more autocratic strategies. There is not as much room for interaction as individuals are so enthralled in their own educational goal that direction takes precedence. From time to time you should still utilize more democratic methods in your leadership and teachings, but the majority of what you do should be well thought out by the leader.

## **Final Advice**

Ultimately, your leadership style and your classroom management style should be a combination of your natural and learned abilities coupled with the situation around you. This will dictate whether you should utilize an autocratic or democratic style of leadership. For me, I teach both general education classes and major specific classes. I am democratic at times and autocratic in others. This **flexibility** in style will be a large factor in your success with your class. You also need to consider the motivation levels and self-esteem levels of your class.

**Call to action:** Now it is your turn to think about your ability to foster an atmosphere of excellence within your group. What are your current strengths and what do you need to work on? How can you learn the skills that you are lacking? Are you drawn to an autocratic or democratic style naturally? Which one does your situation require more often? If it requires both or the opposite of your natural style, how can you work on developing the skills to lead in the other atmosphere?

By answering these questions and developing an actionable game plan, you will be equipped to master classroom leadership.



**Week 0:** December 17, 2014

And so it begins

I am an instructor of mathematics at a California community college. Over the next several months, starting in January 2015, as part of an exercise in reflective writing, I will post my thoughts and opinions about the teaching and learning of mathematics in my classroom.

I'll be back soon.

**Week 1:** January 8, 2014

The first week

My course in discrete mathematics has begun. The syllabus is complete. Adds and drops are in process. I want my students to question what they are learning this quarter, not just become proficient in the mechanics of notation. I want them to read definitions for understanding, to pick apart sentences and paragraphs in the text to see why words and phrases such as 'exactly' and "at least one element" are important. I want them to learn to better understand results by paying particular attention to details of methods of formal proof. This is a course where they must not only follow proofs, but must produce them as well. For some of my students this will be the first time they need to consciously examine their own methods of deduction, their own chains of reasoning.

I want the students to question me and the text. In every text there are errors, some simple, some subtle. I encourage my students to look for errors and ask about them in class. I make mistakes at the board—I don't even have to plan them. I encourage my

students to catch my mistakes, and quickly, without worrying that the mistakes they see may merely be misunderstandings. Already, in my first class, I've dropped an equal sign from an inequality—a clear mistake in transcription—and presented a conditional that was vacuously true—not a mistake but hard to accept. In both cases students challenged, respectfully, what I was doing. Hopefully my answers affirmed the challengers—at least that was my intention.

I want the students to become a mathematical community. I want them to work together in study groups. I want them to share frustration and discovery. But I also want them to mature mathematically as individuals and that requires that they experience some frustration/discovery on their own—they cannot rely entirely on a group for their breakthrough moments. I will assess their progress using homework, quizzes and tests—the homework allowing for more group support, the quizzes and tests requiring more individual demonstration. But assessment to me is still an art that I am mastering and I hope to gain new insight this quarter into the value of my methods.

The topic this week is propositional logic. We'll develop an algebra for statements using logical connectors. We'll look at argument forms. We'll look at the representation of digital logic circuits as Boolean expressions. We'll have a first quiz to test prerequisite knowledge. Homework will first be due next week.

## **Week 2: January 17, 2015**

### [Week Two](#)

For all students in my class there exists a chance to learn. True or false? This week the topic was universal and existential statements. How to prove them true; how to prove them false. How to negate them. How common they are in advanced mathematics. I also returned two assessments: one quiz and one homework—the results were bimodal: students doing well or not well at all—this bimodal distribution of

assessment seems to have replaced the normal curve—if it ever existed in graded assessment.

In informal assessment I found the normal distribution, or I imagined it. From responses to my questions during lectures a small number of students appeared to be fully engaged. From posture and distraction another small number of students seemed bored. The majority of students seemed to be listening and watching and taking notes—I don't know if they were transcribing or interpreting—it might be nice to have an observer in the room.

In preparing the lesson I personally gained a deeper understanding of the universal quantifier as a short-hand for a conjunction of multiple predicates and the existential quantifier as a short-hand for a disjunction of multiple predicates. It may be possible to do more with this understanding in my next round of teaching discrete.

Universal instantiation and existential instantiation—the foundational ideas of general rules and particular instances. These concepts seemed excessively formal when I reviewed them, but as I saw them on the board they gave the impression of great stones of support for the mathematics we use every day—solid and necessary, but best left submerged from view.

Several students dropped my class this week—the drop-without-grade date is Sunday. They sent no messages to say why. Almost all of them took the first two quizzes and submitted homework. Most did well enough. Perhaps the amount of work required may have discouraged them—I collect and grade homework weekly; I quiz weekly. Did some of them dislike my method of teaching? I had to force myself to write that last sentence.

Some students came to office hours to have me solve their harder homework problems. There is a tension in teaching between scaffolding and challenge. Some faculty see too few failures as low standards. Some faculty see too many failures as improper support. My current thought is that a teaching moment is an experiment that has no control. All lessons learned about teaching are anecdotal. If there are universal rules can they ever really be true for all particulars?

## Week 3: January 24, 2015

### The third week

This week we began our study of mathematical proof. We covered several major topics,

- Proof by example (proving an existential statement true).
- Proof by counterexample (proving a universal statement false).
- Proof by exhaustion (proving an existential statement false or a universal statement true).
- Proof by generalizing from a generic particular (instantiating a generic, arbitrarily chosen element of a set and deducing that it must have a certain property using rules of logic, definitions, and accepted rules of mathematics).
- Direct proof of a universal conditional statement (in the simplest case, instantiating a generic, arbitrarily chosen, element of the indicated universal set; assuming the hypothesis of the conditional statement is true for the instantiated element; using rules of logic, definitions, and accepted rules of mathematics to deduce the truth of the conclusion).
- Proof by contradiction (negating the statement to be proved and deducing a contradiction in the enclosing system of mathematics; rejecting the contradiction, not the system, and therefore rejecting the negated statement, and asserting the original statement)
- Proof by contraposition (instead of directly proving a universal conditional statement is true, directly prove that its equivalent contrapositive is true).

To provide material for practice we established several mathematical definitions and theorems,

- definitions of even integers, odd integers, prime integers, composite integers, rational numbers, divisibility, standard factored form, div, mod, absolute value, floor and ceiling

- theorems of factoring integers into primes, properties of even and odd numbers, divisibility, absolute value, floor and ceiling

I presented examples of the above types of proof using the mathematical definitions and theorems that were developed, as well as rules of logic, rules of algebra, etc. I used a two-column format for the proofs: the left column listing formal mathematical statements; the right column giving reasons that the mathematical statements were validly deduced from what came before.

All of this was done in five hours of lecture. The students (at least some) followed the lectures closely since they caught my mistakes and challenged the reasoning behind some of the deductions. I prepared notes for the lectures last weekend (four hours) and reviewed and updated the notes before each class (five hours). The notes are handwritten so I don't publish them for the students—I think it is better for students to see the information presented live, record what they think is important, and read the text for the 'written' view of the same material.

There was a quiz at the start of the week on the material from week 2. The scores were again in a bimodal distribution, with most of the students doing very well. The homework scores were high for those who did the homework. I spent approximately six hours correcting quizzes and homework (I am teaching 61 students in two sections).

It was important to establish an agreed level of detail for the proofs. As students learn to question their knowledge of what is mathematically true and false, and why they believe it, they can begin to doubt that they understand much at all about mathematics. That's an important awakening, but it can lead to excessive denial of conventions and excessive need for detail. I offered my examples of proofs in the lectures as templates for the level of detail that they should strive for in the class—a little more detail than they will need in the future as their understanding matures. From past experience, some will think it too much work that belabors the obvious but others will see the value of exposing more layers of the chains of reasoning that bind our mathematical foundations.

## Week 4: January 31, 2015

### Week 4

This was the week when I looked out over the class and realized I had lost them—they were not responding to lesson prompts, their body language spoke of anywhere-else-but-here.

It's the fourth week of the quarter and for this course it may be the longest week of the quarter. We're covering a chapter on sequences and proof by induction and the start-up material is vocabulary intensive, with multiple, short topics that need to be stitched together into theorems that are then proved by mathematical induction. Not everyone's idea of fun.

Mathematical induction, by the way, is a deductive, not inductive, method of proof (in the natural science meaning of induction and deduction). The induction in mathematical induction refers to the inductive step in the proof method which shows that the assumption of the truth of,  $P(k)$ ,  $k$  an integer, induces, or leads to, the truth of  $P(k+1)$ ;  $P(n)$  is a predicate that falls true or false based on the integer  $n$ .

This week I was pleased to have students, in groups of two and three, ask several questions on difficult homework problems. This was good for several reasons: some students are clearly working on homework before the weekend, and, more importantly, small communities are being formed where students are discovering, together, both answers and dead-ends to mathematical questions. A little not-so-good was my discovery in last week's homework that several students had the same, exact, almost-correct answer, to one problem—it seemed to be a transcription from a common earlier source. Apparently teaching now requires some skill in exegesis and hermeneutics. I wrote on each homework paper, the same, exact, almost-correct comment, to which I have been awaiting questions on interpretation.

One embarrassing moment was my forgetting a key insight needed to clarify one of the homework problems (a proof); it's embarrassing since I solved all the homework

problems before the quarter started. After looking at my notes at home, the insight returned, and it really wasn't too difficult. It may or may not be true for everyone, but I find that I have a problem-solving state of mind that can only be entered in quiet isolation. In that state of mind solutions to problems develop and outside that state of mind the solutions fade away. I've had the same experience with developing software. An algorithm can be constructed in a state of quiet concentration, and luckily it is written down and tested since it has to be used, but, as time goes by, the essence of the reasoning behind the algorithm fades and returning to it at a later date, for example to answer a colleague's question about it, also creates embarrassing moments.

Next week we continue with induction, strong induction and the well-ordering principle. And then we move to recursion. Recursion is challenging and useful and can encode very terse, yet information-dense, definitions, theorems and software. I'm working on some small-group activities to help introduce recursion. Next week will tell if they work to make the week shorter than this one.

## **Week 5: February 7, 2015**

### **Almost Mid Quarter**

This week we continued the topics of sequences, iteration and recursion. I cooked up an in-class activity on the implementation of recursive function calls in programming languages, but at the last minute decided it was not quite ready to serve. Maybe next quarter.

We derived, as a class, a recursive formula that models the actions of an old game, "The Towers of Hanoi." The game has three poles in a row and disks of different sizes, each with a hole at its center. The disks start in a wedding-cake arrangement on the leftmost pole and must be moved to the same arrangement on the rightmost pole, following two simple rules: only one disk can be moved at a time and a larger disk

cannot be placed on a smaller disk. It's a lesson that begs to be tried in person with a model. I made do with the board. Maybe next quarter.

An interesting side note on the teaching of the Towers of Hanoi. The explicit formula for the recursive sequence that models the moves needed to move  $n$  disks is  $2^n - 1$ . For 64 disks this formula, on a standard calculator will give you the estimate,

$1.844674407 \times 10^{19}$

Writing a simple, recursive program in the Haskell computer language, however, will give an exact answer.

Here's the program (the recursion is the reference to the function hanoi within the definition of the function hanoi):

```
hanoi n = if (n == 1) then 1 else (2*hanoi (n-1) +1)
```

Here's the exact answer,

18,446,744,073,709,551,615

My lectures follow the flow of the text—dipping in and out to help connect definitions to theorems, theorems to examples, examples to narrative, etc., and sometimes to look underneath the text, to what is not being said. The relationship of lecture and text is another tension in teaching. Follow the text too closely and the students may wonder why they don't just read the book themselves and not bother with class. Lecture apart from the text and students may wonder why they bought it. Of course there are students who read the text but don't understand it and students who understand the text but don't read it, but that's a different tension of teaching.

Next week is the midterm exam. I'll be writing it this weekend. Of course it should be a Goldilocks test, not too easy, not too hard, but just right. Maybe next quarter.



**Week 6: February 13, 2015**

### Musings on the Midterm

This week the students sat for their midterm. And sat. And sat. None of them finished completely in the allotted time. Every submitted test had at least one question only partially answered. No student left early (which is a good sign since students tend to leave early when the test is too hard or too easy—maybe this was the Goldilocks test).

I find it difficult to create good tests. In part because I'm not sure what a good test is, especially before I give it (and isn't that disrespectful—me giving the test and not the students taking it—and what does that mean, to 'take a test'—this reflection on teaching can, I'm afraid, become a gaze into a carnival hall-of-mirrors). Perhaps I recognize a good test, after the fact, when I grade it? Is it good when the grade distribution is normal? Or when it is not normal? Is it good when a student reaches a correct answer but only through a torturous, almost incomprehensible chain of reasoning? Is it good when a student easily gives the correct answer but ignores the request for justification?

Maybe I'm so unsettled today because of the lesson that followed the midterm, set theory. We started our discussion of sets with the Russell paradox that arises from imagining a set  $S$  that contains all sets that don't contain themselves. I'll let you explore the question, 'Is set  $S$  an element of set  $S$ ?'

What do I try to balance when writing and endlessly editing a test? (Yes, many parts of teaching seem to never end.) [Aside (I teach math after all). This week we also studied the halting problem in computer science—can we write a universal program that will be able to determine from the description of any program and a list of data to be processed by the program, whether or not the program will halt or run endlessly. The answer is related to the Russell paradox.] Back to balance—for sure I don't write a balanced test by measuring it using some exotic formula with multiple variables—as much as that might appeal to me as a math teacher. I think I must cite the tired analogy of riding a bicycle—some actions are done unconsciously once the skill has been learned—and

how does one learn the skill? Can it only be through trial and error? And who is the judge of attainment? [In the manner of Socrates, when you don't have an answer, ask another question.]

What do I try to balance? What are some tensions that create a balance? What is the gravity of testing that calls for balance?

- Coverage: "This test covered too much." versus "You picked the one area I didn't study."
- Difficulty: "Yes, I've seen all this before." versus "When did you show us that?"
- Challenge: "Look at me, I'm finished really early." versus "Is it still possible to withdraw?"
- Grading: "I'll have your results tomorrow." versus "The don't pay me enough for this job."
- Gravity: "I need an A." versus "What have I learned?"

That's enough; before I further test your patience and my balance.

**Week 7: February 21, 2015**

### [Functions and Rabbits and Birds](#)

This week we looked at functions.

- How to define a function as a subset of a Cartesian product of two sets.
- How to define a function as an explicit transformation of an element of one set into an element of another set.
- How to define a function in a Venn-like diagram.
- What it means for a function to be one-to-one, or injective.
- What it means for a function to be onto, or surjective.
- What it means for a function to be both one-to-one and onto, or bijective.
- How to prove a function is injective, surjective or bijective.

- How to prove a bijection has a unique inverse.
- How to compose two functions to create a third.
- How to prove that the composition of two injective functions is injective.
- How to prove that the composition of two surjective function is surjective.
- How to prove that the composition of a function and its inverse is equivalent to the identity function on the domain of the function.
- How to define the cardinality of any set, finite or infinite (two sets have the same cardinality if and only if there exists a bijection from one to the other).
- How to show that a set is countable (find a bijection from the set to or from a subset of the the positive integers).
- How to show that a set is not countable (suppose it is and create a contradiction.)

When examining the structure of a system of mathematics we assume, define, and prove, looking for connections and abstractions. Is this the best way to learn a system of mathematics? I don't think it's sufficient. It may be somewhat like learning a human language by studying its alphabet, words and rules of grammar without trying to use the language in dialog. Or somewhat like learning a computer language by analyzing its keywords and expressions without writing and testing programs (a dialog with the compiler and the computer system). Not sufficient, but perhaps still necessary. Can you believe that the set of integers has the same cardinality as the set of even integers if you don't understand the definition of cardinality which depends on the definition of bijection which describes a property of a mathematical construct called a function which can only be formally defined by an agreed definition of the word set?

Is it surprising that some students of discrete mathematics find the course too hard? Or is it surprising that some students of discrete mathematics find the course too easy?

This quarter, based on feedback from last quarter, I decided to add more interactive examples to my lectures. A number of my new examples look back on functions from continuous mathematics: linear, quadratic, exponential, logarithmic, etc. In discussing one-to-one and onto functions, I use a mix of polynomial functions that all students have seen in prerequisite courses and present general arguments, from graphs of the functions, as to why they are or are not injections or surjections. I also show, briefly,

how the first derivative of a cubic function can be used to show that it is or is not an injection. This reference to a derivative engaged some of the students who had taken calculus, but, unfortunately, it panicked some of the students who had not taken calculus. I think this is another tension of teaching—how far can you step out into other, related areas of your subject to help students make connections, without creating separation anxiety?

This week I also had several students from previous classes ask me questions, in the study center, on notation that confused them. After an exchange of questions and answers—to help me understand what they did not understand—it became clear to me that the students could see the trees but not the forest. Unfortunately, it did not become clear to them that this was the case—I couldn't get them to stop circling the trees. Perhaps, it's like looking at one of those ambiguous pictures that can be seen, for example, as either a rabbit or a bird. I saw the rabbit; they saw the bird. Maybe we needed to explore the definitions of class, order, family, genus and species (sets after all) and prove that we were, figuratively, mapping our mental expressions of two different species using two different one-to-one and onto visual functions. Or, maybe not.

**Bonus Week:** February 28, 2015

### [Does this count?](#)

I gave a quiz this week to assess my students' understanding of functions, finite and infinite, and functional notation, including the application of a function to a subset of its domain, and it didn't go well. None of the students finished on time; they all thought it was too hard. As we push deeper into formally defined structures of math the students' intuitive understanding of what is being asked by a question is beginning to fail them. We're reaching that point where the logic of the vernacular and the comfort of counting

numbers is impeding, rather than enabling, their interpretation of more abstract mathematical notations and structures.

This week we looked more closely at the notation and structure of relations. Every function is a relation, but not every relation is a function. Both are subsets of cross products, but there are rules that functions must follow that relations can ignore. (I sense that there might be an analogy here with life but I'll leave that for another time.) What was a highlight of the week? A student asked me about the validity of using mathematical induction (counting) to prove that two general sets had the same cardinality. And after a discussion he understood that it wasn't quite good enough since the sets were not constrained; they might not be finite and they might not be countably infinite, they might just be uncountable. What was a low-light of the week? I made an error in writing one of the questions on the quiz. No matter how many times I reread a quiz, errors slip through. I also find this true in writing emails, or proofs, or papers, or programs, or blog posts, or anything at all. I remember rewriting a program to substantially reduce the size of an internal data structure—that was at a time when computer memory was much less abundant than today—and at the same time breaking, unintentionally, with a last-minute change, the reporting function of the same program, causing it to write out all messages in duplicate. When I went to demonstrate the savings in memory to the quality control group it was hard to convince them of the validity of the savings when everything they asked the program answered twice.

One other reflection on teaching. Reflection on teaching is hard work. But now I am reflecting on reflecting on teaching. Is there no end to this? Countably or unaccountably so?

**Week 1: January 14, 2015**

Lecture / Discussion

Every quarter I promise myself and my students that there will be lots of discussion in the class. I use interesting books that provoke thoughtful discussion (assuming anyone reads them). I include a reading guide with questions, important points and quotations that I hope can spark discussion. When the class meets for the second time, I start in asking about how they like the book, what they thought was interesting, etc. When it goes right, we start talking about interesting topics, beginning with content covered in the book and then branching out to contemporary issues related to the content. This happened this last week, and I was thrilled, but after class was over, I worried about what students had left with. Just how much course content had we covered, and had we covered it clearly enough for it to be a solid foundation for the next class?

The next class session I put up a page of notes and talked through them for a good part of the class. This time, there was much less discussion, although it did not disappear altogether. By the end of the class, I had not said all I had planned to say or presented all the material I had prepared, but I felt the students had a better grounding in the material, which was important as their first test is fast approaching. But just because I explained a point does not mean they really understood it. So I wonder whether I should focus on clear and detailed lectures or questions for class discussion.

When I feel completely overwhelmed with this dilemma, I think back on my own college experience, which was likely typical. There were several hundred people in my survey U.S. history course at UCSB back in 1983. The professor – Dr. Robert Kelley – lectured on whatever topic he chose. The lecture might be very specific, and there was really no opportunity to ask questions. Questions had to wait for the discussion section held each week by one of the teaching assistants. The content of the course was contained in the textbook, and we were responsible for learning it ourselves. This is not the most creative model for teaching; and yet, it was these survey courses taught in this style

which kindled my love of history and my decision to switch majors. Something in Dr. Kelley's lectures touched me, regardless of the specific content, some of which I'm sure I internalized and most of it I forgot.

So when it comes down to it, what should I be doing in the front of the classroom? Is it really that important for me to cover the material in a comprehensive way, or can I just leave that to the book? Either way, how much of that information will students retain in the long run? Should I focus on sparking an interesting discussion? Those discussions are rich but hard to corral into a meaningful structure. A course that is no more than a series of rap sessions also does not have long term benefit. And yet, if one of us hits on a relevant point that really resonates, that could be enough to galvanize a student or students to want to learn more, either within the discipline or on their own. It is a survey, general education course: is sparking that interest enough of a goal in itself to make the rest of the objectives secondary? Conversely, if I just stand in front of the room and tell a story – but a good story – and that story sparks the imagination of one or more students to want to learn more, have I met my objective?

**Week 2: January 25, 2015**

### [This is only a Test](#)

I hate tests.

As a teacher, I want to talk about what interests me, and I want to hear the opinions of my students. I want to present a world to them and let them jump into it or not, whichever they choose. U.S. history is my context, but the real energy occurs – as it likely does for the rest of you – when we can talk about the life we are living today. Making those connections between slavery back then and injustice today, or how 19th century American Protestantism allows us to know exactly the last phrase President Obama will say in a speech he hasn't even made yet, is really the most fun I have. So now how will I test that?

In a sense, tests are threats — the swords that hang over students' heads while we have our “engaging” conversations. I'm engaged because I love the subject; you're pretending to be engaged because I will hurt you (academically) if you aren't. I've made some adjustments to my tests to make them more comfortable to me and hopefully for my students as well. I welcome your thoughts a chance to hear what you've done to make tests work for you.

First of all, I realize that I don't get paid to entertain or even to profess, but to evaluate: at the end of the quarter, who deserves a passing grade and who doesn't? It is not professional, moral or even legal for me to hand out grades based on any criteria other than the level of student mastery of the material. So the final grade for my class is based almost exclusively on test scores.

I write all of my tests, all of the questions. I teach the class: I assess the class.

To make sure the students read the material I assign, I give quizzes during the quarter. The quizzes are multiple choice questions. I have come, at the request of students, to let students use their notes, the reading guide I write and from which I design the questions, even the book. I worried that this would make my quizzes too easy, but I find it relieves pressure on the students who are prepared and does nothing to help the students who aren't. I have also recently begun to give students a chance to justify their answers. I really like this idea, as it turns a multiple choice question into a potential short answer question: tell me why you think two choices are correct for this question, or none of them. About half the time, I will give a student credit for a “wrong” choice if their justification shows they understand the point the question was assessing (a trick I learned from the mathematicians).

I also give essay tests. I ask comprehensive questions; essentially, what have we been talking about these last two weeks? I used to have students take these tests in class, but I lost a whole class session this way, and the essays stunk. Take home essays take longer for students and are harder to write, but writing is hard, right? An essay test is as much a skills test as it is a knowledge test. There is the danger of authenticity with a



take home test; however, so I've begun to pair take home essays with in class writing — more short answer questions than essay questions.

The quizzes, essays and short answer tests provide a running record of each student's performance throughout the quarter. They are useful in keeping students on track and helping me identify where there may be problems. The process of preparing for and taking tests may help students crystallize the information in their heads, assuming they study. But are the tests themselves useful for students: do they learn anything while they are taking them? What if tests were interesting and fun – like puzzles – but still valid assessments of student learning? That would be my ideal test.

### **Week 3: January 30, 2015**

#### [I am Regret](#)

“Don't look are the “good recommendations” in here cause' u'll regret (I AM REGRET!!) Not a easy grader, lots of reading, give only 1/2 of full point on the writing assignment. He said he give grades because you do the work, but actually is not. 50 students, 1/2 drop and only 13 of the remaining PASS. Think carefully because you choose the him”

I honestly don't understand student expectations. Above is a RateMyProfessor entry for me from an obviously – or not so obviously – disgruntled student. All kidding aside (OK, most kidding aside), how could this student have possibly imagined he or she would be able to pass a reading and writing intensive course with the skills demonstrated? I have since scaled back my sales job on the first day of class assuring history phobic students that if they just make the effort, they will be able to pass the class. Of course you need to have some basic competency in reading and writing English or the class will likely be too much for you.

And yet, most of the students who withdraw or fail my class have the basic ability to pass. And they seem to want to pass, at least on the first day. As the weeks progress, however, a fair number stop showing up. Some have overscheduled themselves. They

simply had no idea how much effort a college class would take. My class, by the way, is probably no more strenuous than most. It has regular weekly reading, regular but not weekly writing assignments, and a research project that takes about eight hours over the course of the quarter (more on that in a later blog). I think some students gamble that they can fake their way through the material and still do OK. Others like the student above may think they will get an A for effort. I suspect they learned these strategies from other classes they have taken, perhaps in high school, hopefully not at college.

But regardless of the outside commitments – and I realize they are many – so many of my students just seem to give up too easily, despite my efforts to bolster their confidence and keep them going. This amazes me because I fear for these young people. Their future is not as easy as mine was when I was in college in the 1980s. Many are working towards a degree or certification or transfer, but they don't seem to be very focused on it. But there is a lot riding on the courses they are taking, including mine. These students do not seem to have the money to just continue to drift through college. And many do not seem to have the time to waste either. I don't expect everyone to love history, but I do expect them to continue to want those units and credit. There is a lot more to get out of my class too, but if a student can't even make the decision to walk through the door, the rest of it hardly matters. We should all always be striving to develop the best ways to retain students and help them succeed, but some of them need to wake up (literally) before the education train leaves them behind. Otherwise, they will be regret, and regret is nothing you want to be.

**Week 4: February 8, 2015**

### [Research Project: Go Do It!](#)

Some of you may have heard my presentation (my very first solo presentation!) on the research project I do in my history courses as a form of authentic assessment, but if you haven't or don't remember it, here it is again.

Probably the most dreaded part of the history course for most students is the research paper. Typically, students are asked to come up with a thesis, do some thorough research, and write a paper that can be fifteen pages or more. Historians do write a lot of papers, but the most fun a historian can have is digging through the records of the past for the interesting tidbits of history. After years of doing this, he writes a book, and if he is a good writer, someone may even read the book. I wanted my students to experience what real historians do, even though they would have to do it at a more modest level.

There is a lot of primary source information on the internet, but I want my students to work with actual documents, partly because it is cooler, but partly because I thought of a way their work could actually be relevant to the profession – more on that later.

The actual old sources for students to work with can be found in museums, archives and library special collections up and down the Peninsula. My students have gone to several of these locations to find unique topics to build a paper around. But more interestingly, some of the archivists asked if my students might be able to help them organize, categorize and describe the mountain of source materials they had. This is the most vibrant part of my project now. Students can write a research paper using the sources they choose from one of these local archives, or they can forego the research paper and volunteer a set amount of hours to help the archivists with their work. There is still some writing involved, but in this latter option they experience working with actual primary sources, everything from old county maps to television sets.

My students who have been able to volunteer as archivists have told me it is interesting and fun: many volunteer extra hours to see their work completed or even continue volunteering after the quarter is over. I am so pleased that some of the local archives have offered this experience to our students, and the archivists are happy to have the help. The relationship highlights Foothill College in the community. When students come to me for letters of recommendation, I can write about their unique work in a way that I hope impresses the application committees.

Those who don't volunteer craft the information from their sources into a paper that illustrates a time and place in history. My goal for these projects is to eventually post them online so that they can be read by others and so that the sources they are based on can have an online link. For if these sources are just stored away and no one knows where or what they are, they might as well not be there at all.

I'm very proud of my research project, which is really a combination of serendipity and ideas others had before me. I'm pleased that the students get a unique and fun experience. I'm grateful that the end results are interesting for me to read. I'm glad that local institutions meet and benefit from our students. And I'm gratified that through their work, my students are contributing in their own small way to the profession. I recommend hands on experience like this wherever practical to everyone teaching.

## **Week 5: February 14, 2015**

### **[Back to School](#)**

Two years ago I went on Professional Development leave and went back to school. Like Patrick Morriss, I found it an eye-opening experience. It's good to see things from the student perspective. By the way, going back to school while on leave is great fun: I recommend it to everyone.

I learned a lot in the four history courses I took that year, both about history and about students and teachers. I was surprised and pleased that three of my four professors put special emphasis on their teaching. I know we are all about teaching at the community college, but I did not know how important actual teaching was to professors at the university: were they aware?

It turns out they were. I remember one incident in particular. One of my professors used detailed slides that she had obviously spent a lot of time on for her lectures. After the midterm, she realized that many students were not engaging with the material the way

she wished. She completely changed her teaching style, in the middle of the semester, to see if she could better reach her students. The slides went out the window, and she spent much of the class session asking questions of us about the primary sources we had read. The class seemed more responsive (I liked both approaches myself), and hopefully everyone did better on the final.

I found I had many advantages over the typical Sac State student that made college much easier for me and highlighted for me the challenges most of our students struggle with. First of all, I was taking six units a semester, not a full load or overload as other students were taking to stretch the value of their tuition dollars. Second, I was not working, or rather, I was being paid to go to school (thank you Foothill-DeAnza!). So when a book was assigned to me, rather than worry about when I was going to be able to fit it into my busy schedule, the book was my schedule. And of course, I wasn't going to school to reach some distant goal, but to just enjoy the classes I was taking. I try to get my students to enjoy the subjects they are learning about, and many do, but some are just too stretched thin to really engage in the experience.

I did have one professor who stood out by his lack of interest in the art of teaching. He was a fun professor — full of stories and opinions — and by all accounts pretty popular, but he rarely covered the material in the depth I knew he was capable of. I'm not sure why: I suspect because it is hard. I don't struggle with what I am going to include in class, but what I am going to leave out in order to allow for deep coverage of material, including class discussion. This professor came in and talked about what was on his mind for an hour and a half and then left, never mind where in the material we started or finished. It is fun listening to someone you agree with, but I didn't learn much.

One last point about breaks: I really enjoyed my lecture courses, but I found that even with my enthusiasm and background knowledge, I started to drift after forty-five minutes. The best lesson I relearned was to mix it up: break up those lectures with some other type of action.

**Week 6: February 21, 2015**

### [The Points Don't Matter](#)

“I don’t give points,” a colleague told me. “I look at a student’s work and I assess its value. My professional judgment is enough.” I rolled my eyes: it sounded arrogant to me, but after more thorough explanation, I decided to try not giving points myself. I am now almost a year off of the point system and am perfectly comfortable with it. If my students are unhappy, they are keeping it to themselves.

Here are some of the reasons I don’t miss the points. First, points seemed to clarify grading, but actually obscured it for me. I still use letter grades only because we all seem to know what they stand for: an “A” means great, perfect, mission accomplished – everyone wants an “A”. An “F” means failure: you didn’t understand it or do it. A “D” is essentially an F; not a complete disaster, but not good enough to pass, to demonstrate understanding. A “C” means good enough to pass — lots of understanding missing, but enough to get by. A “B” is better than a “C” but not as good as an “A”. Sprinkle in some “+” and “-“s and you can communicate your assessment to any student.

Let’s take a five question quiz, normally worth five points. All correct is an A – good job. But what if a student missed just one question: she still understands a good portion of the material. Is that still a good job (A)? I might say yes. Under the point system, however, she would get 80% — a B-. If she had missed two questions – not great, but she still gets most of the idea – she would have 60% — a D-, pretty much a failure. In a course of 500 points, though, this little quiz would be pretty much meaningless, so take the D- in stride.

Second, students can play with points, pushing for 100% of points on easier work, bombing the harder stuff, and still squeaking by with a passing grade in the class. Now you can use weighted points if you have the mind for it, making some assignments worth more than others, but that is already an admission that straight points aren’t working for you. I just tell my students that the five tests in the class will be the basis for

their grade, that the project will influence that grade, and that all the other work taken together will push the final grade up a little or down a little based on the pattern of performance and success I see. So the final grade I give for the class takes everything into account and weighs some items more than others. There is probably a logarithm to work all that out, but it is too complex for me. As long as I communicate to students what is most important, that is where they spend their time and effort.

Practically speaking, I can now make my tests and quizzes however long I want. I don't have to add or subtract questions so that they are the correct number of points. At the end of the course, students sometimes still want to know why they received the grade they did. Instead of telling them their point totals and percentages, I have to give them a more thoughtful and qualitative answer. I have not had any complaints from these conversations. All in all, I plan on continuing to be pointless.

## **Week 7: March 1, 2015**

### **The Perfect Class**

I drag myself into week 8. My students – those who've shown up – are barely awake at 8:00. It's not the time, I think, it's the mileage: they are worn out. At this time of the quarter, I wonder ruefully what the perfect class would look like.

In the perfect class, students come through the door energized. They chat excitedly to each other about what happened in the previous class. A student was absent for that last class, and she feels like she missed out. I put some questions on the board. I can already hear the biggest one: "What are we going to learn about today?"

Learning in the perfect class is fun and engaging, like a board game, but also relevant to the students' lives and world. No one has to be prodded into contributing. On the contrary, my chief role is to moderate the discussion so that everyone can be heard. Students enjoy talking about the topics that interest them, but these same topics fold

seamlessly into the content of the course and the skills of the discipline. So when the class is over (too soon!) everyone leaves knowing more than when they came in.

Students get hands-on experience doing the kind of work that professionals in the field do through activities like the research project. There is no plagiarism because everyone is doing unique and original work. And they are proud of what they've done.

Tests are fun. They challenge the students but don't frighten them. They are more like puzzles than tests, and students like to match their wits against them, sometimes individually and sometimes in groups. The tests show me what the students have learned, but they learn from the tests as well. Nobody cheats on the tests. What would be the fun in that?

For the final, each student demonstrates what he or she has learned from the class and why this knowledge is important to them. It is clear who is ready to move on and who needs to try again.

(As I was typing this, the perfect class sounded a lot like first grade, but of course I've never taught first grade). I doubt that any of us teach the perfect class, but I bet all of us have glimpsed bits of it in our own imperfect classes, even in the week eights of our discontent. Keep tinkering and reworking and borrowing ideas from others. Together we will create perfect classes!



**Week 1:** January 12, 2015

Week Two

I love the start of a new quarter. It is a fresh start, a brand new day. Everybody is working hard to make a good first impression, both students and instructors. I enjoy getting to know my students individually, and as a class. Who likes to give answers in class? Who needs me to come ask them individually for their questions? Who can a count on to tell me when I'm writing off screen on the projector?

We all got a good rest over the break and are ready to go. There is such possibility. I think "maybe this is the quarter that all of my students will pass". The students have not yet had any disappointments in this class. I wonder what it would be like to teach a class and not have to assign grades. I got a taste of this teaching in the Summer Bridge Math program. I was assisting them to prepare for the placement exam. I did not have to play the double role of instructor and evaluator. I was just there to help them. The exam, which I did not write or control, could give them the good or bad news about how much they learned. I found it made a much more relaxed atmosphere and I had more open relationships with my students.

This quarter, I have decided to give a lot of free feedback. I will grade their papers, but give them credit based on participation, not on the percent of answers that are correct. With this method, I will be able to grade much more of their work. When grading papers, deciding how much partial credit to assign to a problem takes a considerable amount of time. Will the students work as diligently to get the correct answer if they know that it is not a factor in their grade on this paper? I think they will. Everybody likes to do good work. It is human nature to want to do well.

This type of grading will reduce the pressure to be perfect during the learning process. It lets the student know that I'm not expecting them to get it right away, that it's not going

to be easy, and that I expect them to make mistakes at first. This will support the growth mindset that I am trying to foster in my class.

Now, I do have to assign grades. I will have to wean them off this type of grading as they gain more experience in an area. My plan is: almost completely free feedback on classwork and written homework, quizzes graded in the normal fashion, but with corrections, and regular exams.

I hope it works. I hope that the students will be more relaxed. That they will let themselves try and learn from what happens. That they will not shove a poorly scored assignment in their backpack without looking at it. We will see.

## **Week 2: January 23, 2015**

### [Week Three](#)

Here are some of the reasons I get such pleasure from teaching basic skills students. Now, I'm going to use the term basic skill, but I'm not really using it correctly. The students that I'm thinking of are the ones in my Algebra classes. Also, this does not describe all the students taking these classes, and there are students like the ones I'm describing everywhere. These are just some things I notice more often when teaching basic skills classes.

They make me feel appreciated. When I help them with a problem in class or during office hour, they say thank you and really mean it. When they understand and do well, they often attribute their success to me. They did well, so I must be an excellent teacher. I do feel a bit bad about this. They should take the credit for their good work. We work on this during the quarter.

Basic skills students are more interested in their learning than their grades. They are not worried about maintaining a near perfect GPA so they can transfer to some prestigious university. That quiz they got a B on makes them proud. It is an improvement over the

last time they studied algebra. They know more now than they did a few weeks ago. Measuring success in terms of improvement is a happy and healthy way to approach learning math and everything else in life.

They are inspired by my belief in their ability to do well. Many students start the class thinking that they are “bad at math”. They get excited when they realize I don’t share this belief. As I teach, I explain what is important when studying statistics or in that pre-calculus class they plan to take next quarter. I recently had a student thank me for believing that they could make it in these higher level classes.

Their tenacity inspires me. Many of the students have complicated lives. Heavy work schedules, health problems and family issues are common. It’s hard to focus on math when you have so many other things on your mind. Also, many of them are taking a class in which they have not done well in the past. I admire their ability to put aside past failures and try again, often with such a great attitude.

I find teaching basic skills students particularly rewarding. I hope they are getting as much out of the class as I am.

### **Week 3: January 28, 2015**

### **Week Four**

It is so difficult to tell how well the students are learning the material during class.

In recent years, most of my classes seem happy and engaged. They ask insightful questions. They answer my questions. When given problems to work on in groups, they circle up and start discussing. Together they complete difficult problems with small amounts of guidance from me. I have fun and leave class feeling like a lot of learning was accomplished. But here is the problem. The results of their individual written assessments are frequently not as good as I expected. I overestimate their understanding.

I have been extremely worried about one class I have this quarter. They don't look like they are enjoying themselves. Our dialog in class frequently drags. When given problems to do in class, they individually hunch over their paper even when I suggest working together. They do ask for help. They do check their answers with each other when they have completed the assignment. I frequently leave class feeling discouraged. But, I just got a big happy surprise. They did great on a quiz that covers a topic that is usually quite difficult for students at first.

This leaves me with questions.

Question: Have they been bored this whole time? Is it too easy?

Answer: No, most of them are struggling at the introduction to a new topic. I can tell by the questions they ask.

Question: Do they leave class with a lower estimation of their understanding and so study more at home?

Answer: Maybe, they have not been doing any more homework than the normal class.

Question: Is the individual written assessment not the gold standard in determining a student's mathematical knowledge and abilities?

Answer: Yikes! Too big to consider right now.

I think I'm going to come to the conclusion that learning looks different for everyone. This class is made up of a group of students who get more out of quietly working through problems than discussion. I will let this be okay for them and for me. I will try to recognize and make space for these students in all my classes.

## Week 4: February 5, 2015

### Week 5

Some of the students in my Algebra classes plan on taking Pre-Calculus and then Calculus. Others are done with their math requirements after this class or are going on to Statics or Math for the Liberal Arts. These are two very different paths. The majority of students are on the latter path. Why then is the curriculum designed for student in the former path?

Well, I know why. The prerequisite for a transferable math class has long been Intermediate Algebra, because that is the prerequisite at the transfer university. We must use it as the prerequisite here so our courses will transfer. Does this prerequisite make sense? Not to me. When we add a prerequisite to a class, we must show that it is necessary for the students' success in the class. I have taught Statistics. I did not have to rely on any previous knowledge from Intermediate Algebra.

Learning how to simplify a radical or subtract rational expressions makes one smarter. It develops the brain's capacity for abstract thought. These are also very useful topics if you plan to study calculus in the future. There are other topics though, that are equally good at developing the brains capacity and are useful and necessary for any educated member of our society. Let's consider percent extended to exponential growth and the inverse function, the logarithm. This is not easy to learn. Conceptually, it may be even more complex than working with rational expressions. It also requires skill in calculation and algebraic manipulation. There seems to be this idea that changing the curriculum is an effort to "dumb it down" thereby lowering the requirements and value of a college degree. I don't think this is the goal of those that advocate for a change to this prerequisite requirement. I don't think it will be the result.

The movement for change is gaining momentum. StatWay is now both CSU and UC transferable. Many colleges offer a course designed to prepare students for Statistics that is not Intermediate Algebra. Students then use this course to successfully

challenging the prerequisite to Statistics. For some time now placement tests and prerequisites have been seen as having negative effects on equity. They are under strict requirements and scrutiny. The Intermediate Algebra prerequisite on many courses is at the top of my list of those that require reform.

## **Week 5: February 12, 2015**

### [Week Six](#)

I recently read the first chapter of **How College Works** by Daniel F. Chambliss and Christopher G. Takacs with some of my colleagues in the math department. The authors followed a group of over 100 students from their institution for ten years. The reading explained what a huge impact human contact has on students. The contact that seems to matter most is that with friends and instructors, the people they see regularly. These people have a large influence over the students' choice of classes, and degree and career goals.

This reading made me realize the importance of community. If the college is just a place that students come to take classes before they run off to their jobs, families and other responsibilities they miss out on so much, including maybe the support they need to finish their educational goal. When I walk by the Dental Hygiene rooms on my way to drop off exams at the testing center I often see students eating together. Sometime it looks like pizza has been ordered and they are having a little party. At graduation every year I see the decorated caps of those in the Veterinary Technology program. These little glimpses of these programs that I know very little about show the strong community they have developed. This community may be in part responsible for their high completion rates and high rate of success on licensing exams.

We would like to have a similar community in PSME. The PSME center has long been a place for students to come together to work on problems and get help. We now have the Foundations Lab where students in the Basic Skills math classes can come to have

their own little spot. Last fall before classes started, we had STEM day so students could come and meet each other and their instructors in a relaxed fun environment. Instructors work to create community in the classroom in so many ways. We are always looking for ways to increase the sense of community for our students. It is difficult when for so many students school is just one part of a busy and complicated life.

This all makes me worry a bit about online classes. I have yet to teach an online class, but it is something I would like to try. How can community be created in an online class? I'm sure discussion boards help and there are other ways to improve the sense of community, but can it ever be as good as what can be developed in a face-to-face class. This is just one of many challenges that comes with this fairly new type of class.

Whether in a face-to-face or an online class, building community is a challenge, but it is one that yields great rewards as it is achieved. It is also an enjoyable task. We like interacting with our students. Why else would you want to teach?

## **Week 6: February 18, 2015**

### [Week Seven](#)

The other day I got the following email from a student in my Pre-Calculus II class.

*Good Afternoon Professor,*

*I was just wondering if the further along the math series i went- if the rate at which the material (how fast I would need to learn new concepts) delivered would increase at an increasing rate or be linear. It seems the upper level classes require more dedication, but is there a point where only a select few smart kids can progress without dropping out?*

*Thanks much,*

*XXX*

First, let me point out how pleased I was with his understanding of rate of change and his ability to apply it to this aspect of his life. He knows that the rate he must learn new concepts is increasing and is asking if the rate of increase is constant (linear) or if the rate itself is increasing. This is a topic in Pre-Calculus I that we have reviewed in Pre-Calculus II. It is a sophisticated concept. I'm happy to see that he understands it. I'm also pleased that he had given so much thought to his education and the math classes he will take in the future.

Here is what really struck me about the email. I wanted to share this because he is asking me about fixed mindset versus growth mindset. He is trying to decide which is correct and he is looking to me, his instructor for guidance. Sometimes it is hard to remember what it is like to be a young student, to still be exploring your strengths and abilities, to still be figuring out how your mind works. I also sometimes forget how strongly our culture favors a fixed mindset for math. It is not my perception. I don't realize how many people believe this to be the case. I am happy that this student is questioning a fixed mindset and that he is looking to me for guidance. This reaffirms the value of the Mindset Intervention we use in our math classes. It is a valuable tool.

Knowing I could make a difference for this student by assuring him of my belief in a growth mindset was nice for me. We are entering the part of the quarter that is hard for me. As we approach week eight of the quarter, it has become apparent to me, and some of the students that they will not be able to pass the class in which they are currently enrolled. What is most frustrating for me is that many times the students are in this situation not because of lack of ability or desire, but because of the complications in their life outside of school. So many times it is family, health or money issues that have prevented the students from putting the necessary time into the class. I remember one quarter not too long ago that I had two students in an 8 am Pre-Calculus class that worked a night shift. They were coming to this 8 am class after working all night. This is a serious disadvantage. How can a brain in that state be prepared for the workout I had in store for it. I feel powerless to help them with these aspects of their lives. Sometimes it seems the best we can do is give them another chance to retake the class next quarter.



There are other ways we can help students. Sometimes these things may seem small and insignificant from our perspective, but for the student, it can be huge.

## **Week 7: February 26, 2015**

### [Week Eight](#)

Last week I attended a workshop on serving students with learning differences here at Foothill College. My first reaction was great gratitude that I teach in a time that recognizes and accommodates learning differences. I believe my mother has some learning differences, although I have never broached the subject with her. It's a difficult and emotional topic. She spent a large part of her education being told that she was stupid. I don't think she has completely shaken this off. It is one of the reasons I wanted to be a teacher. The last thing school should do is make the student feel stupid.

I have noticed that education is generally structured to favor those that are good learning a large number of topics shallowly and quickly. As a side note, I have been pleased that the math department (and probably the other departments as well) do their best to fight against this aspect of our educational system. Learning many topics quickly, but shallowly is not the strength of many of the students I have taught with learning differences. I have found that many of these students like to think very deeply about a topic for a long time. Personally, I think this is more valuable. There are just so many topics I am required to teach them. It's hard to give them the chance to learn in the way most natural for them.

So while I am pleased that students with learning difference are no longer thought of as stupid, and that they are given accommodations like extended time to allow them to display their knowledge and ability, it just does not seem like enough. It seems that to truly include all types of students, the educational system needs some sort of drastic overhaul that I cannot even imagine. For now, I can look for ways to adjust my classroom structure (in the confines that currently exist) to make it more inclusive.

Since this is my last blog entry, I thought I would include an update to my grading system for classwork. You may recall that I have been giving students full credit for giving classwork “a good honest try” instead of basing the score on “correctness”. I am happy with the results so far. I have not seen evidence that students put less work into the assignments due to this grading system. I have seen students stay after class to rework problems that I told them had error. They did this knowing I would put a 5/5 on it either way. I have seen students leave problems blank even though they know they will be marked down for this. They could have scribbled some nonsense there and gotten points for trying. Overall, I think it is training the students that the comments on their work are more important than the number on the top.