**Conclusion: Learning—the Impact of Authentic Engagement**

It began in mystery, and it will end in mystery,
but a savage and beautiful country lies in between.
–Diane Ackerman

The Navajo people learned a long time ago
that winter is the ultimate test of applied faith.
–Rex Lee Jim

Life's Many Shades of Gray

I set the chalk down and turned to face my AP students.

"All right." I said. "I deliberately waited until the end of class to pass these back because I wanted to give you some general feedback on them before you read your individual comments."

I set the stack of essays on the center table and pulled over a stool from a lab bench.

"Oh, oh. It must be serious," joked Catherine. "He's sitting down with us."

"Ha. Ha." I retorted.

"Yeah, Mr. Brock, we all already know what you probably wrote on all of them anyway." Olivia fretted impatiently. "I just want to see how badly I disappointed you and get it over with."

I looked at her and replied, "Actually, that's what I wanted to talk with all of you about."

I held up the papers and scanned the room, studying their faces.

"Many of you did exactly what I have come to expect on this assignment." I announced. "You told me you'd buy a new prom dress anyway and then spent the rest of the paper talking about how awful a human being that makes you."

I shook my head with a bit of a melancholy smile.

"I don't give this assignment each year to make you all feel guilty." I told them. "And I don't have you write this Issue's paper just to force you to wrestle with the responsibilities you have for how your choices impact the environment. Knowing what you have learned these last few weeks, I actually challenged you about whether to buy a new prom dress when you don't *need* one because I wanted to see if you could understand the real nature of the question."

That produced puzzled looks and even a frown or two.

"It's not a yes-no question, people." I asserted. "It only looks like one. Several of you came close to seeing that as you attempted to justify buying a new dress because you could reuse it for formals in college or share or donate it. But most of you treated the assignment as a binary, either-or, black-white, yes-no question, and it isn't."

"What do you mean, Mr. Brock?" Lucy asked, brow solidly furrowed.

I had to stop to search for words.

"Look." I changed gears. "For the past few weeks, you've had to learn just how badly humans have managed to damage nearly the entire natural world…to the point where it is not exaggeration to say our own survival as a species is threatened. But that's precisely why you cannot treat questions such as 'Do I buy a dress I don't actually need?' or 'Do I drive when I can walk?' as if the answer is merely 'yes' or 'no.' You can't treat 'Are we doomed?' as a yes-or-no question."

"Of course you can, Mr. Brock!" Sara politely objected.

I was quick to reply.

"Look, what happens if you say the answer to that question is 'no'?" I asked her. "We're *not* doomed."

She was clearly thinking about it for a minute, but it was Lucy who then raised her hand.

"We no longer have to be morally responsible for how we treat the world." She replied.

"Exactly!" I said. "If you truly believe that the answer to the question is 'no,' then you absolve any responsibility to attempt to cope with the problem."

I scanned their faces again. "And if the answer is 'yes'?" I asked.

"Then the problem is beyond solving." Sara responded. "And it doesn't matter what you do."

"Precisely!" I concluded, acerbically. "We might as well all eat, drink, and be merry while the getting's good because nothing else we do is going to matter anyway."

"Either way, nothing happens." Olivia mused thoughtfully.

I gestured emphatically.

"Exactly!" I said again. "If we treat 'Are we doomed' or 'Do I buy a prom dress' or 'Should I walk instead of drive,' etcetera as yes-no questions, then we never have to do anything to address the situations that created them in the first place." I asserted. "Only by recognizing that questions like these are *not* actually yes-no questions can we have any hope of genuinely answering them the way we need to."

I studied their faces and decided I needed to respond further to the concerned worry I still saw there.

"Take the prom dress question." I stated and pointed where Quincy, Winnie, and Noor were all seated. "The three of you are roughly the same size." I said. "So you might decide that you'll each buy one dress for one dance, and then trade dresses for two other dances. You basically get three different looks for the price of one and save the resources needed to make six additional dresses."

Sara protested again.

"But Mr. Brock, even you've pointed out it's more complicated than that." She argued. "Those extra six dresses kept someone employed."

"Okay," I responded, nodding. "So you start a dress exchange for the area schools, using donated dresses, and girls 'rent' their dress by paying for the necessary alterations. Then you're not only saving resources; you've employed someone as well."

I tapped on the table.

"The point," I told them, "Is that you're going to have to start thinking outside the confines of a strict yes-no box if you're going to have any hope of addressing the environmental crisis your generation faces–or for that matter, any of the other issues we have studied this year. The world desperately needs people who know how to do more than answer a simple 'yes' or 'no' to life's really tough problems, and if I've done anything at all of value in this class this year, it has been to challenge each of you to become such a person."

I noticed Keziah was fighting to suppress a grin, and I suddenly realized how strident the tone of my voice had become.

"Sorry." I apologized, rolling my eyes at myself. "It's the danger of being a preacher's kid."

"It's okay, Mr. Brock," said Helen. "We even kind of enjoy that you get so passionate about such things."

"Hm, hm." Maryam added. "We really do appreciate that you care."

Others nodded and exchanged knowing looks, and I chuckled and shook my head at my own sermonizing.

"Anyway," I continued. "I simply wanted to you to see with this assignment that just because a problem *looks* black-and-white doesn't mean that it actually *is*."

I passed back their papers, then, and everyone except Lucy and Olivia started to pack up to leave. The two of them walked over to where I was standing, with Lucy looking clearly agitated.

"Mr. Brock, I *have* to ask." She pleaded desperately. "Learning all of this has made me literally terrified. You can ask my mother! I've actually been having trouble sleeping this past week. I *have* to know: do *you* think we're doomed?"

I turned to see that some of the others in the class were now hanging back, and I knew I needed to be quite intentional in my response.

"Lucy, I want to show you something." I said and went over to where my laptop was located. Quickly googling *Follow the Frog*, I brought the short video up on my screen to play it. "Watch this," I said.

They all did, and soon there was some laughter and chuckling, and even Lucy smiled a bit.

"I know how overwhelming it can feel." I said, turning to face her. "I *get* it. But that's why I always start this unit with that quote from Leopold that I shared with all of you. As he reminds us, just because we will never achieve perfect justice in this world doesn't mean we stop working toward it; likewise, just because we cannot repair all the environmental damage all at once doesn't mean we stop fixing what we can."

"But there's SO much, Mr. Brock!" Lucy bemoaned.

"Which is why we always have to keep perspective," I responded. "It's why I keep a copy of this video. To remind me whenever things start to feel too overwhelming that I still have power to effect change. Follow the frog, Lucy; it'll help you feel better."

She took a deep breath, then, and let out a huge sigh, while Olivia hugged her, and I knew we had walked the abrupt emotional quandary back away from the cliff.

"Can you send us that link, Mr. Brock?" Maryam asked.

"Sure." I answered. "I'll send it out to the entire class. And Lucy? Get some sleep." I encouraged.

Everyone who had remained now started to leave, but when she got to the door, Olivia turned back.

"You never answered Lucy's question, Mr. Brock." She challenged, politely but firmly. "Do you think we're doomed?"

I sighed and pursed my lips.

"A species that kills for pleasure and consumes simply for the sake of consuming does not leave me optimistic." I stated flatly.

"Then why do you work so hard to teach us the way you do?" She requested sincerely.

I answered truthfully.

"Because I can."

## Hope is a Verb

Very early in my career, my mother–who is also an educator–shared with me the analogy that teaching is a lot like sowing dates. This particular fruit-bearing palm is notoriously labor

intensive, requiring copious amounts of watering and regular tending in an arid environment conducive to neither of these activities. Yet in its famously long lifespan, it does not produce usable dates to eat until after at least seven years and often many more than that. Hence, those who plant date trees must cultivate them with the knowledge that they may never see the literal fruits of their labors and that what they do, they do for future generations. Of course, teachers must also do their work trusting that their efforts will make a genuine difference in the lives of the people who come after them, and they must believe in the power of the individual to better a world they may never see. Hence, the analogy: to teach is to plant a date seed in the sometimes-arid mind of another and to water and care for it there in the hopes that its fruit will someday nourish the future. Teachers, like date farmers, are investors in infinity.[1]

Today, though, it can feel rather futile at times to be an investor in the infinite, especially if you're an ecologist like I am. As I suggested in the introduction, it is not possible to teach in the life sciences as I do and not be intimately aware of just how dramatically dangerous ignorance and irrationality can be. Any biologist will tell you that extinction is the actual norm for the natural history of this planet, and the equations modeling human populations all agree that keeping our ever growing, ever expanding populace alive is only possible at the expense of permanently consuming resources that cannot be replenished to sustain the process. It would, in fact, take *four* additional entire Earths to provide everyone the quality of material life we in this country take for granted,[2] and I know from my background and training that if we don't do something about the path we're currently on, then collapse into mere economic devastation and social turmoil is the *optimistic* outcome of where the population models say humanity is headed.[3] It is not hyperbole to say that we are facing the gravest crisis of our species[4] because the bottom line is that "homeostasis" is biology's equivalent of physics' "Law of Gravity" and the concept of homeostasis says there are finite limits for every organism—even ours. Sadly, and scarily, my student, Lucy, had every right to be as anxious as she was.

Why, though, start my final thoughts on teaching and learning and authentic engagement in the classroom with what amounts to a biology lesson—and a depressing and rather disturbing one at that? I do so because it dramatizes nicely the existential dilemma we all must face if we wish to strive to be more authentically engaged as teachers: even if I try to attempt everything suggested in Chapters 1-6, will any of it really matter—especially given the obstacles presented in Chapters 7-9? Not all of us will necessarily see a letter such as the one I shared from my student, Mark, and for those who do, think of how many hundreds of other kids got taught that never said a single thing. Therefore, just as each of us must face the possible futility of our own mortality, those of us who teach must ask ourselves whether the effort to help children develop their mind's capacity to "speak" serves any truly meaningful purpose or not.

For example, when I first started teaching environmental awareness 30 years ago, I harbored the hubris that this knowledge would inspire my students to become agents of change who would go out and transform the world. In fact, I can remember as clear as if she were in the room as I write this, one of my students, Parilee, saying "Well, now that we know, we'll fix it, right?" It is 16 years since she graduated, and Southeast Australia is burning to the ground; while people in the Southern states in this country are recovering from January tornadoes that are the new normal. I no longer harbor my hubris and, instead, teach environmental awareness today in the hope that some remnant of my students successfully pass through the coming evolutionary bottleneck to rebuild the world more wisely on the other side.

I still teach it, though, and the critical word in that last sentence is "hope." As I continued my conversation with Olivia that morning, I told her something that I have shared with

my students for years: hope is not something we possess or have; hope is something we *do*. Hope is not a noun; it is a verb. Because to genuinely hope for something is to do the work to make it happen. Hope for a better world? Roll up those sleeves and start the messy work of fixing it one patch of dirt at a time. Hope for better schools? Use what's been written here to authentically engage in the actions necessary to improve what happens in the classroom. Hope for better lives for our children? Invest the necessary time and resources to accomplish it. The simple truth is that the only effective response to life's existential dilemma about futility is to act *as if* what we do has purpose and meaning (to do otherwise would be to fall into despair). Therefore, each day, every day those who would be good teachers hope actively. Hope, do. Hope, do. Hope, do.

Yet all that doing requires hope's sibling, love, and we all know that love is never easy. Indeed, the kind of loving that nurtures "date trees" is arduous, uncertain, and often painful. It means risking lofty ideals such as disclosing who we are to share part of life's journey, and it means showing up regularly to support the more mundane things like dance concerts and sporting events. It means caring "always at least a little bit more about the children" than we do about whatever subject we teach, and yet it also means holding them accountable for living out what they learn in their lives. It is feeling joy and pride when we watch a child overcome and learn from a mistake, and it is knowing the agony of when we have realized that we have failed them. The love that plants the "dates" of human understanding and selfhood is all these things and more, and it is why each spring, I always cry a little when my seniors–many of whom I have taught more than once–say their goodbyes. For where pain is absent, no genuine relationship has been lost, and where there was no relationship, there was no learning. Tears, in a way, are education's very soul: where the heart has not gone, no one will follow.

And the Winner Is…

Ahsha hurried up, breathless, and dumped her backpack on the floor.

"Sorry I'm late, Mr. Brock." She gasped. "I had fourth period over at Bryn Mawr, today."

I shook my head reassuringly. "Don't worry about." I told her. "Sarah and I haven't been able to find a CD player yet anyway."

She glanced around at everyone in the room and frowned.

"What are we going to do, then?" She asked worriedly.

"I guess I'll have to try and *hum* very loudly." I responded, jokingly.

She gave me her "Mr. Brock!" glare, and I held up a hand to ward off any retort.

"Seriously," I said, "the worst that happens is I'll have to clap or bang on a lab counter to make some kind of noise. Why don't you start getting everyone organized? We're going to need to move all the tables out of the way to make a lot of room for this activity."

"Okay." She replied, nodding, and gestured to Jane and Ann Margaret, who were standing nearby. "Everybody, we need to get the tables moved out of the way and to put all the chairs in a big circle facing out."

"Success, Mr. Brock!" I heard as Sarah entered the room, toting a borrowed radio.

"Hallelujah." I murmured and took it from her to plug into one of the lab stations.

She clapped her hands to get everyone's attention and started the meeting.

"Welcome everybody to another exciting year of TTLG!" Sarah announced. "For any of you who don't know us yet, I'm Sarah, and this is Ahsha, and we're your co-presidents."

"And we'd like to thank you all for coming to today's club open house," continued Ahsha, taking over smoothly. "As you know, Ms. Waters is having the school's clubs trying something different this year, and you'll be signing up *after* the first cycle of them so that everyone can have a chance to visit the ones they want and check them out. Therefore, we've planned an activity today which we hope will give you a good idea of what we do in TTLG and make you want to come back for more."

Both Sarah and Ahsha looked in my direction, then, and Ahsha spoke. "Mr. Brock?"

I stood up to explain what they would be doing and studied the room.

"We're going to play musical chairs this afternoon." I informed them. "Only we're going to play it twice using a different set of rules each time."

The new girls all looked bemused, and I could tell they were all thinking: Huh? What does musical chairs have to do with a philosophy club? The regulars, though, all smiled in anticipation.

"The first time, we're going to play using the traditional rules." I said. "So, if you'll all take your places...."

I gestured at the circle of chairs, and the girls all hopped up from where they were sitting and gathered around it. There was some giggling and snickering and some playful pushing and shoving as they jockeyed for the "best" spot, and when they were ready, I turned on the radio.

The students began to circle, still laughing and joking, and I let the music play for a full a minute this first time to get everybody lulled into a sense of complacency. Then, I switched it off, and the dynamics, of course, changed quickly as everyone fought for a chair.

Julie was the first out, and she glared as everybody else laughed and congratulated themselves.

I shrugged, sympathetically and told her, "Grab a seat on a table. Everybody else, stand up!"

They did, and I started the music again.

Twenty-two, of course, became twenty-one, became twenty, and so on. The pushing and shoving got worse, the joviality disappeared, each round's loser left cursing or glaring as she took her seat on the sidelines, and finally, we were down to the last two, Jane and Emily. They circled like warriors as the music played, and everyone else had taken sides.

"Get her Julie!" urged Peale and Ann Margaret.

"You can take her, Emily," shouted another table.

I stopped the music.

Jane body-checked Emily as if the Stanley Cup were on the line and grabbed the remaining seat. Emily was caught by the table full of people she flew into and spun around to confront her rival.

"Damn it, Jane! It's only a game!" She exclaimed angrily. Then she glanced quickly at me. "Sorry, Mr. Brock."

I smiled to let her know the cursing was forgiven under the circumstances, and as Jane stood and preened, I acknowledged her.

"Jane, you're our winner." I declared. "Now everybody, we need to get all the chairs back in a circle again for our second round."

They did and then turned to me expectantly.

"Here's the deal." I told them. "We're going to play again, only this time, the rule is that when a chair is removed, everybody stays, no one is ejected, and you *all* have to take a seat somehow."

There were some nonplussed looks directed at me. But they all got in position, and when the music stopped this time, they all stood around for a moment looking at one another. Finally, various girls signaled to each other to have a seat, and Sarah volunteered to be the one to sit on someone's lap.

"Okay. Everybody up." I instructed. "Take a chair away, and let's start again." The chair was removed; the circle tightened, and I turned on the radio.

They marched for about thirty seconds this round, and already, it was amazing to watch the new dynamics the rule change had introduced. The girls were chatting again, already strategizing who would sit on who's lap this time, and as the rounds progressed and the chairs were removed, different leaders stepped up to take control and guide the sitting process, until at long last there was only the one chair and two column of girls seated on one another's laps, resting on Sarah's knees.

"Good job." I told them, and everyone cheered and stood up, thinking the game was over. "No." I said. "There's one last round this time."

They looked befuddled as I walked over to remove the last chair.

"This time, when the music stops, you have to all sit down with no chair at all." I informed them. "And without touching the floor!" I added.

I only let the music play a few seconds since the marching was no longer the point, and when I stopped it, they all stood around discussing the situation.

"Any ideas, anybody?" asked Ahsha.

"Hey, I remember we did something like this at my church youth retreat once," declared Jane. "What we need to do is all gather in a circle..." She walked them through it, and they all began to gather in a tight circle.

"Oh, I get it!" exclaimed Sarah.

Finally, backs tightly bunched against fronts and hands clasped on hips, they had Jane count it off. "On three." She said. "One, two, three, sit!" Leaning back slowly, each sat on the other until the entire group was one large seated circle.

"And done!" I proclaimed. "Everybody up and take a real seat for us to debrief."

There were a couple of "high fives" and much laughter as the girls all now stood up from the circle, and I waited patiently for each of them to take a seat in one of the chairs. When they had, I nodded at Ahsha and Sarah.

"So what we like to do in this club is activities like these," said Ahsha, "and then we talk about what they mean."

There were some "ah, ha!" looks on the new faces.

"And I'll get us started." Ahsha continued. "What do you think the two ways of playing the game might symbolize?"

One of the new girls responded. "Well, they obviously could represent the different ways we can live our life."

The others all nodded and murmured agreement, and Sarah responded.

"Okay," she said. "Then how did it feel to live the first way?"

"Crappy." Ann Margaret replied. "I felt all stressed out and stopped thinking about anything but getting a chair before anyone else could...and you were the worst, Jane." She said, pointing.

"Yeah, you were seriously out of control, there." Emily agreed, and several other girls all nodded.

"It's a game!" Jane defended, blushing. "You're supposed to try and win."

"Are you supposed to try and win?" I interjected. "Or were you supposed to try and not lose?"

"What do you mean?" She asked, puzzled.

"Look at both games." I said, addressing everyone. "What counts as winning in the first version and what counts as winning in the second?"

Another new girl, Chelsea, responded. "Well, in the first way we played, winning was getting a chair." She said. "In the second one...." Her voice trailed off, and she looked perplexed.

"Ah!" I responded. "What *does* count as winning in the second one?"

They all sat thinking for a moment, and then Ahsha replied.

"Solving the problem." She stated firmly. "Figuring out how everybody can have a seat."

"Okay," I answered. "Then can you *lose* the second game?"

"Yes and no," said Peale from across the room. "If you don't find a way for everyone to sit, then *everyone* loses. At least in the first game, only one person really loses, yourself."

"Oh really?!" Emily reacted. "How many of you think there was only one loser when Jane was the only one left?"

There were some mixed murmurs of both agreement and disagreement, with little side conversations began to break out around the room, and when even Ahsha and Sarah started to quibble with each other, I interrupted.

"How many people think Jane actually lost?" I asked over the buzz.

That quieted everyone, and again, they all sat thinking for a while.

"I do." Someone finally replied very quietly, and the girls all turned to look at Jane in shock.

"Jane, why do you think that?" I asked her, working actively to keep my tone neutral and not nod my head in approval.

"Because everybody hated me at the end." She answered. "I 'won.' But I was all alone. In the other game, we were all together." She turned to Emily. "And let's face it, winning the first time wasn't much fun."

Then I did nod my head as Jane and I looked at each other in understanding for a moment, and I could tell from my peripheral vision that expressions of "oh!" were starting to pop up around the room.

"So if the games are analogies for life, why is it that we almost always seem to play the first one?" I asked, looking around the room.

There was a pause, and then Ahsha spoke. "Because we grow up in it; it's all we've ever known."

"Okay," I replied, gesturing for her to go on.

"Also, the first way is a lot easier to play." She stated. "It's a lot harder, Mr. Brock, for *everybody* to win."

## The Reason to Choose the Hard

I want to shift gears here toward the end and be a little less theoretical and scholarly in my tone and a little more intimate and personal in my approach, and I want to start with the word or idea that I'm confident is on the mind of any reader who has made it this far: Hard. It's a term I haven't used much to this point. But anyone who has processed the preceding ten

chapters has got to be wondering by now: who in their right mind would work as *hard* as it is going to take even to *attempt* to accomplish everything that I have challenged needs to happen for our schools to become truly functional again? My readers who are fellow teachers are also going to add: you forgot the mountains of paperwork, the endless grading, the lower pay, and the serious amount of time it takes to plan even a mediocre lesson. Add in the sense of isolation and frequent lack of administrative support for any learner-centered, active classrooms you might try to create in the first place,[5] and yes, the word we all are looking for is "hard."

What is more, compounding all this "hard" is the reality that like parenting, there is no handbook for how to teach well (that there might be is part of the whole Cartesian myth). Being authentically engaged requires actions for which there are no preset guidelines: divulging who you are, setting boundaries, relinquishing center stage, controlling bias…. The list goes one, and like learning to parent, the only way to figure out how to do it is simply to "study it for yourself. Deal with it yourself. There are no curriculum plans or lesson plans. Invent your own way of dealing with it."[6] Good teaching is just doing it–creating from scratch whatever is necessary to succeed at the task at hand–and there is no way around it: all that doing is just plain hard.

Which brings me back to the question we're all thinking, even if we're not saying it aloud: given how demanding this profession is, *what* could possibly compel *anyone* to become a teacher—let alone work hard enough to be good at it?

The answer, I think, lies in that world, "compel." Educators with authentic engagement feel *compelled* to teach the way they do. They feel *compelled* to create classrooms where real learning happens. They feel *compelled* to engage students with their full humanity. They feel *compelled* to bring their "deep gladness" to a world in need. They feel **compelled** to do these things and more because they understand that "*no punishment anyone lays on you could possibly be worse than the punishment you lay on yourself by conspiring in your own diminishment.*"[7] Good teachers know that no matter what the cost to them to be authentically engaged in their schools, the personal price they would pay to do otherwise is infinitely worse. Therefore, they choose the hard because they have to; the alternative is simply unthinkable for them.

And here's why. At the National Teacher Hall of Fame, there are some display cases, and in some of those cases are some letters:

*...I learned that failure was ok. It didn't mean I wasn't smart enough or good enough, it just meant I wasn't there* ***yet****. This is one of the most valuable lessons I have ever learned. I learned that understanding took hard work and dedication. You have never brushed off any of my* ***many*** *questions; you embraced my curiosity and encourage us all to search for a deeper meaning…*

*...then came some of the best advice I have ever received. It was our first class after winter break, and we were all standing around talking before class started. Someone said, "Now I can't wait for spring break!" and you looked up from whatever you were doing and said, "****Don't wish your life away****." We all looked up in awe as we processed what you said, and then 30 seconds later the conversations continued and class started soon after.* ***I still think about those 5 words almost every day****. Whenever I find myself wishing for the day to be over so that I can go home, or waiting patiently for the weekend, or for summer, or for the next year, I stop myself and think about what you said. "Don't wish your life away," I tell myself, as I try to slow down and live in the moment…*

*...one experience with you will always be solidified in my mind, however. When I came to you and asked for your help in the interview process for my scholarship, I never expected the kind and extent of help that I was going to receive. After talking with you multiple times and*

*doing practice interviews, I was extremely prepared. Your advice was invaluable...and I know I would not have gotten the scholarship if it hadn't been for you…*

*…you have taught me so much more than just material. It was your teaching and guidance, compassion and morality, that has shown me an example of how to be a good human in this world. Thanks to you, I have become a harder worker, deeper thinker, a better friend, and a better student. You have taught me how to be accountable for my responsibilities, and how to persevere under difficult circumstances. You have taught me the importance of showing compassion and being a bigger person…this year has been one of the most challenging years of my life, and I am eternally grateful for the kindness and understanding you have shown me. Thank you for believing in me even when I did not really believe in myself…I know that wherever my life takes me, and whatever I end up doing, I will be a better person for having met you, and will never stop learning, and never stop trying to use my powers for good….*

As is no doubt obvious, these letters are from students, and while it might be ideal that these could be the letters of any teacher, anywhere, my point in sharing what I once read is not to aggrandize or to extol any specific individual. Nor is my point that these should somehow be letters to which every teacher should aspire to receive. No, my point in sharing what somebody's students once wrote is my act of hope that the quality of any child's education would be such to begin with that he, she, or they would be unable to single out a specific individual teacher to write such a letter to in the first place.

*That* is the ultimate obligation for all of us in education; *that* is the ultimate purpose for authentic engagement in the classroom; and *that* is the ultimate reason for all of us who teach to choose the hard. These letters serve to remind us what education can be, sometimes is, and fundamentally ought to be for all our children everywhere, and I offer them now, here at the end, simply to recall for us what is truly at stake in education. As former Yale scholar, Seymour B. Sarason challenges, "the question is *not* whether most teachers can climb their Mt. Everest the way [the best] have climbed theirs. The question is how far up that Mt. Everest most teachers [decide to] climb."[8]

And until each of us in education chooses the highest ascent possible—to light "candles" against the "darkness" with every lesson taught, every learning embodied, and every student known—our schools will continue to fail to become the authentic centers for teaching and learning we so earnestly need them to be. My hope in offering all that I have with this project is that we will begin to change things for the better.

Notes

1. I have always liked this analogy, and in those horrible moments in the classroom when nothing seems to be going right, I have been known to start repeating to myself like a mantra: *I'm planting dates; I'm planting dates; I'm planting dates….*
2. Wilson, *The Future of Life*, p. 23. Depending on your choice of mathematical equations you use, this number can range from 3.5 to 5.5 Earths, but 4 is the most commonly used number in the environmental science literature.
3. E. O. Wilson, "The Bottleneck" in *Scientific American*, Feb. 2002; pp. 83-91.
4. Peter Ward, *The End of Evolution: On Mass Extinctions and the Preservation of Biodiversity* (New York: Bantam Books, 1994).
5. Sara Day Hutton, ed., *Teaching by Heart: The Foxfire Interviews* (New York: Teachers College Press, 2005), p. 62. Indeed, this experience of isolation and lack of support on

the part of teachers was a central theme of the educational journal, *The Active Learner*, for its entire five-year life-span; see also pp. 53, 63, 75, 87, 93, 102, 108, 114, 126, & 133.

6. Paley, "Listening to Children's Stories," p. 55.
7. Palmer, *The Courage to Teach*, p. 171; original emphasis.
8. Seymour B. Sarason, *Letters to a Serious Education President, 2nd ed.* (Thousand Oaks, CA: Corwin Press, 2006), p. 110.