Teaching, Philosophy, and Repairing the World Russell Marcus for *Philosophers in the Classroom: Essays on Teaching*, edited by Steven Cahn, Alexandra Bradner, and Andrew Mills October 17, 2017

The autumn after I barely finished college, I found myself teaching mathematics at Jamaica High School, in Queens, NY. It was a sprawling, noisy old building with 4000 students, a struggling school in a struggling neighborhood. I was suddenly faced with responsibility for 170 children, five thirty-eight minute classes of thirty-four students, each day. I had no practical training, just a few liberal arts theory courses. But my dad was the chair of the math department at another New York City high school, so I had resources.

I had only two preps that fall of 1988, two sections of ninth-year math and three of a remedial course called Fundamentals of Mathematics. Every day, I would get to school by six-thirty, and teach my classes and monitor a hallway for one period. Then I would walk out of the building, get into a hand-me-down 1976 Buick Apollo, cry for ten or fifteen minutes, and drive home to collapse. I was learning what it meant to be an adult, and it hurt.

A dear colleague, speaking recently about why she teaches, said that she wants to change the world for the better. Her claim first struck me as pretense, a view she seemed self-consciously to share. I wish I could say that I'm working to improve the world. But I fear that my work is not that important.

Certainly, my research is of little consequence. I've published a little, largely defending an unpopular metaphysics (platonism in mathematics), and an even more contentious epistemology (rationalism). I'm pleased to have received some encouraging feedback from others. But I can't help wonder how much that is a way of aggrandizing their own work. So little in the real world depends on whether there are mathematical objects or whether we have *a priori* knowledge that it's a little embarrassing even to try to make the case that it matters. People live and die, work and thrive, love or fight, suffer and die, in the same way, whether or not there are mathematical objects, whether or not physical theories require them. Even mathematicians don't and shouldn't care too much. Philosophy of mathematics doesn't really matter.

I love philosophy. I love reading Quine's *Word and Object* or Berkeley's *Principles*, or anything by Plato except the *Phaedo*, especially after a year or two away from it, and discovering more in there than I saw before. There's so much to learn, and I keep growing. When I see a smart new move, or a distinction that helps me frame the world anew, there's a self-indulgent thrill.

But I can't honestly say that any of that is important. And if the content of what I'm teaching is unimportant, then it can't really matter whether students learn it. I've taught, to some modest acclaim, for nearly thirty years, mostly useless topics that most students mostly forget soon after they receive their final grades. I'd love to improve the world, but that may be beyond my ken.

I expect that many of my teachers would be surprised that I ended up as a competent academic, or as any kind of success at all. Of the many low points of my academic life, I remember especially my precalculus teacher saying that I wouldn't go anywhere interesting in life; the look of disappointment on the face of my history professor after he read my final paper: "I expected better of you"; my depression at the ends of school breaks; how I would stay up all night watching TV, and sleep through the torture of the next day's classes.

I went into teaching mainly because I couldn't figure out anything else to do after college. I went to an employment agency in New York City right after graduation; they had no idea what to do with me. I sent a letter requesting advice from Roger Angell, who wrote compellingly about baseball in *The New Yorker*, two of my favorite pastimes; I got no reply. At least with teaching, I would have some support

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and potential mentoring, and a salary. And as a twenty-two year old, I did want to change the world for the better.

This was a lesson I learned largely from my dad. My paternal grandfather, a Romanian Jewish immigrant to New York, had built a small business. He had a "factory" (three women with sewing machines in Jersey City) producing curtains which he delivered to retailers on Orchard Street and elsewhere on the Lower East Side. My dad helped his father with deliveries as a kid, but found the dishonest, self-serving negotiations of commerce repugnant. He wanted to teach mathematics, and to do some good, and he started his career, just out of City College in 1959, at James Monroe High School in the Bronx.

After my grandfather's second heart attack, in 1968, at the hospital, his father said to mine, "So now you'll come back and take over the business."

"No, Pop. I'm a teacher."

"Is *that* what you're going to do?" my grandfather spat. "Spend your life teaching the niggers and the spics?"

"Yeah, Pop. That's what I'm going to do."

My father, in his 70s, now, after a 43 year career teaching in the NYC public schools, can still feel the sting. His father had constructed, ambitiously, a new life in a new country, a business, with visions of passing it to his son. My father rejected that ambition, choosing instead what seemed to his father to be a mundane and useless career. He had to learn to live as a disappointment to his father.

At the end of my college career, I wasn't a disappointment to my father, but I wasn't exactly a proper object of pride. I finished with about a C average, despite a relatively strong senior year. I had no concrete prospects or plans.

The *Mishna* is a collection of the ancient Jewish oral tradition, illustrating and explaining the commandments of the *Torah*. One aspect of the *Mishna* is called *tikkun olam*, or repairing the world. It has mystical roots, and can be interpreted, traditionally, as guidance to adhere to Jewish law. It is widely understood today as a responsibility to others, to social justice. I didn't think of teaching as *tikkun olam* explicitly, then. But it played an implicit role, pushing me away from more promisingly profitable pursuits, toward something worthy of my family, and of myself.

My dad is an amazing teacher, and I cannot say enough about his influence on me. Among the broad lessons I learned from him are:

In designing curriculum and individual classes, focus on student needs.

Any class is a good class if the students and the material are well matched.

Your job as a teacher is just to move the students from wherever they are to the next step.

When in doubt, shut up, and let the students work; teaching is service, not self-aggrandizement. Abstract pedagogical theory is almost always a waste of time.

At Jamaica High School, I started to learn how to design a lesson. Start with a short motivational exercise which builds on what the students have learned, challenging them to the next step with a twist they haven't seen. You can subtract 4 from 8, but what about subtracting 8 from 4? You can factor $x^2 - 3x - 4$, but what about $2x^2 - 3x - 4$? Create demand in your students' minds. Get them to want to learn. If you ever need an introductory activity for a high-school math lesson, ask my dad. The guy is a master at thinking out the little steps students need to get themselves through their work. It was a delight to peer into his mind as I started to learn my craft, to understand his experience and skills.

I wasn't a good teacher, then, of course. No one walks into a classroom for the first time as a good teacher. It's a skill, *arete*, and requires honing. I saw my inadequacies daily. Teaching at Jamaica could be especially tough. The city closed the school in 2014, citing a stagnant graduation rate well under 50%. In the semester I was there, a student was shot and killed on the front steps. I saw the drop slip a

week later. My remedial classes, which started with addition and subtraction, were frustrating, both because the students were seeing the same material for years on end, and because they would not master it. Many stopped coming to class, especially the one held in the boiler room next to the cafeteria. Tyrone Alexander offered to throw my motherfucking ass out of the fucking window, rather than do the class work one day. I made mistakes, and students let me know. But I was young, and cared about them, and was sort of OK for a white guy. I didn't lecture them on how much better the students used to be, or get uptight about late or missing homework. I just tried to help them get from where they were to the next step. I showed up every day, and held myself responsible, even when it took all of my courage to get up in the morning to face the exhaustion. I wasn't trying to revolutionize anything. I was just trying to do my job and get better at it.

My father's vision was focused on the close-at-hand: students who needed to learn in the hopes of living productive and fulfilling lives. His father had wanted to build something beyond him. While my interest in teaching is closer to my dad's view, my interest in philosophy is closer to my grandfather's: a pursuit of eternal truths, a world that goes beyond ourselves, *sub specie aeternitatis*.

But my love of philosophy really came from my mom, and my mother's mother. My mom taught me poetry, and the love of words. I had heard that ontogeny recapitulates phylogeny, that metonymy is the generic form of synecdoche, and the "Love Song of J. Alfred Prufrock" as a child. Her mother loved chewing on ideas, obsessing over them. But we didn't know much about philosophy. Her brother-in-law, my Great Uncle Barney, would talk about philosophers, Nietzsche especially. But he was dismissed as pretentious and annoying, a pontificator

My father turned me on to the existentialists when I was a teenager. He handed me *The Stranger* one evening when I was fifteen. "I think you might be ready for this." I fell asleep on it, and cut school the next day to finish it. But my dad and I didn't really talk about it, or much of anything when I was that age.

My grandmother and I would talk about everything. I mean everything, including how my grandfather used to visit the prostitutes over in Red Hook. "Every generation thinks they invented sex." She saw philosophy as continuous with the Jewish tradition of learning. Her father, a peasant communist, had escaped Russia and made a life as a tailor in Brooklyn. My grandmother was bright and independent, but graduated from high school in 1929 and had to work to help the family survive the Depression. She finally got to college after my grandfather retired, graduating from Queens College at age 72, with a Bachelor of Arts in Yiddish studies. With her, I could talk Aristotle and Plato and Maimonides. She lived close to Jamaica High School, and I would sometimes pick up a kosher pizza and have dinner with her after my after-school cry.

I was excessed from Jamaica High on the first day of the spring term. A transfer arrived twenty minutes before my first class, and I was the least senior math teacher. I substituted in various schools for a month before finding an opening at Newtown High School in Elmhurst for the rest of the term, replacing a teacher who needed brain surgery. Again, I had some tougher classes and some better ones. But after a year of being an adult, I was tired. I had no job for the fall, and I was both eager for a different kind of excitement and hoping to find an easier way to live.

I enjoyed working with students, and I had learned already the exhausting thrill of good teaching. You invest yourself emotionally, starting each class with the hope that you figured out how to construct the lesson that will finally get a student to succeed, to develop the self-confidence they need to meet the next challenge. Sometimes it works, and it feels great; *tikkun olam*. But then there's disappointment when they fail, which means that you, the teacher, have failed. There are no student failures, they say, only teacher failures, and I know that's not true or useful. But I can't let it go, because it *is* true, and it *is* useful. Explain that lesson a different way. Use more concrete illustrations. Have the students explain it to you, or to each other. Give them more practice problems. Cajole. Beg. There's always something

else to try, some other way to help a student to succeed.

All of this emotional investment enervated me that first year. Plus, I had to figure out how to navigate the system and to work with the angry older teachers. The year felt like a lifetime. I had a girlfriend with a sense of adventure, also a math teacher in the city and also ready for something new. We moved to Costa Rica with our summer salaries.

After a couple of months in San José, we ran anxious without concrete plans and low on money. A private school near San Antonio de Belén called Costa Rica Academy (CRA) needed a couple of teachers, and we were in the classroom again. This time I taught social studies, convincing the headmaster that a Bachelor's degree in philosophy was sufficient preparation.

In New York City, the curriculum was worked out by others and given to teachers, which was great for getting started. Now, with the freedom of a small private school, I caught the curriculum design bug. I was able to dream about how to structure and teach different courses: literature and statistics, journalism and AP Language and Composition. By my third year teaching, I had found my voice.

But my second year was still rough, and I was making lots of mistakes. I had a world history class with a mix of maybe twenty tenth and eleventh graders. They were good kids, but they recognized my inexperience and they played with it, naturally. A group of about five boys called themselves Los Locos, and prided themselves on their collegial rambunctiousness. I banished at least one student a day to the principal's office, or just to sit outside the classroom. It was a futile show of strength, ineffective in the long term. But it had a small positive effect, enough to earn me a few quiet minutes of instruction. The ostracized student felt the sting a little, though it was also a small point of pride. The rowdiness of the class was contagious. Even Erica Jiménez was banished once, and looked at me with understanding and pity as she left. I was at a loss for better classroom management strategies, and we all knew it.

One day, as I entered the sixth-period class, I heard the students laughing about something which sounded like 'jock-a-cheemba'.

"What's that?" I asked.

"What's what?"

"Jock-a-cheemba."

"Oh, that," thought Ramon Rodríguez, one of the Locos. "It's just, kind of... it's a greeting."

"Like 'hello'? Huh. I've never heard it."

"Yeah, like 'hello'. It's just a little Costa Rican slang."

These were the kids who taught me that 'pura vida' was strictly for tourists; 'tuanis' was hipper. 'Mae' was literally like 'idiot', but used for friends. Thanks to the Locos, I could say, "Oye, mae ¿Que tal?" And get back, "¡Tuanis!" But these were all phrases I had heard elsewhere, unlike 'jock-a-cheemba'.

"So, how is it used?"

"You just say it when you greet someone," Ramon explained, as the Locos nodded agreement. "When you come into class, you can say, 'Jock-a-cheemba, locos,' and then we'll say, 'Jock-a-cheemba, Profesor Marcus."" (CRA students used the Spanish 'profesor', with the accent on the final syllable.)

That's how it went, for the rest of the term. I would enter the class, and say, "Jock-a-cheemba, Locos" and Ramon and Miguel and William and the other Locos would look up with gleeful, respectful smiles, and reply, "Jock-a-cheemba, Profesor Marcus." And then we'd get to work.

Look, it wasn't that I didn't have suspicions. It was clear that something was off about our little dialogue. But I had no idea what the problem was, and using the new script was pedagogically effective. I had shown a little trust in my students, a little vulnerability which helped them to feel empowered. Classes were quieter. The tension of wondering who would be the arbitrary target of my exasperated frustration was mitigated. We started with smiles. I just avoided looking at Erica and Maria during the introductory jock-a-cheemba play. I did not report my class greetings to my Costa Rican friends.

It wasn't until my last year at CRA that my curiosity overwhelmed my fear. Ramon, who had

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graduated the previous year, came back to visit, and I asked. Turns out, yes, it's as bad as I feared. 'Chimba' is slang for a woman's genitals. What I heard as 'jock-a' was in fact '¡Diay, que!'. 'Diay, mae, ¡Que chimba!' The best English equivalent that I can muster is, "Man, what an amazing pussy!" The original had been aimed at one of the young women in the class, of course. And then, well, I just started each day in World History II with an exclamation about the amazing pussy in front of me. Yeah, I was still making mistakes.

Despite my mistakes, something in even my most challenging early classes, was working. The students understood that I cared and respected them, that I wasn't out to wield my authority. My focus was on their learning, and if I wanted them to behave in certain ways, to pay attention or to do their homework, it was because I thought it would be useful to them and because I cared about them. I wouldn't waste their time, at least not consciously so, and I would listen to them, and hear them, and be honest with them. I had to learn more creative teaching methods, better classroom management, and how to craft more thoughtful assignments. I saw all warts on my teaching. But my supervisors were puzzlingly (to me) encouraging. And I was starting to see more clearly why education is so important, a lesson you can't learn really well until you teach for a while, until you see the effects on students and feel their appreciation and trust and start to share their hopes and frustrations.

Even on reflection, I struggle to say what worked, what transferable lessons I learned. At the risk of offering useless abstract pedagogical principles, perhaps it was commitment and caring, about the students and the material, loving what I do and doggedly trying to figure out how to get the students to love it too. Being there, consistently, accessibly, and reliably cannot be underestimated, too. We share with our students the desire for them to succeed. Making that happen is just figuring out who and where they are, respecting their own ends and then helping them to see the utility of others.

I left Costa Rica after three years, returning to New York City for one more year as a high school teacher, and then starting graduate school in philosophy at the City University of New York. I stayed in touch with a few folks from CRA, including Dan Schwartz, who had taught there my first year. Dan hadn't liked working at CRA, but he loved the Costa Rican men, and the thriving, underground gay scene there. The machismo culture and proscriptions against gayness were strong, though the drag show to which Dan took me at a *finca* in the hills above Heredia is still my favorite.

Anyway, Dan ran into one of my former students in a gay bar a few times after the student had graduated. It took Oscar some time to come out to Dan, despite repeatedly meeting him in the relevant places. Eventually, they talked candidly about their mutual discomfort at CRA. Oscar told Dan that my history class, the jock-a-cheemba class, was the one place he felt comfortable in his time there. I don't remember the incident during which I made it clear that the casual homophobic talk in class was unacceptable, but apparently it was heard. It wasn't all mistakes.

At Cardozo High School, where I spent the year between Costa Rica and graduate school, I jumped at the chance to teach an honors geometry class and an AP Computer Science course. I challenged my geometry students to construct proofs about three-dimensional figures. My computer science students and I worked on a program to find the most efficient path between any two classrooms in the school, a 1993 prototype for Google Maps. I took a couple of practical education classes, on cooperative learning and on avoiding confrontations in the classroom. The former led to my first published article. Education classes often get a bad rap, but there's nothing better for a young teacher than listening to good teachers talk about their craft.

Good teaching is hard work, and I worked hard, out of love and necessity. I'm not generally very good at thinking on my feet. I often overprepare, which may explain why I spent thirteen years in graduate school. But I fell in love with the puzzle of figuring out how to connect these students with those concepts. I've always loved puzzles. My wife one year planned a vacation for us: three days in

Paris, France, eating crêpes and walking in the parks and museums. I planned the next year's excursion: a weekend at the Stamford, Connecticut, Marriott for the American Crossword Puzzle Tournament.

Each class is a puzzle about how to organize the content and present it in a way which clicks with this group of students. Every class is different because every person is different and all of their interpersonal interactions are different. You need a lot of tools to reach them all.

But the preparation is more for me than for the students. In evaluating my courses, students tend to remark on my enthusiasm, not my hard work, on the infectiousness of my love for philosophy. Enthusiasm is not fully a virtue, and the word is not always praise. But it fits my teaching and it explains, at least partly, why I returned to philosophy. I like math, and I loved teaching math. But I didn't love math as I love philosophy. Good teachers love what they do and care for their students, and they commit to solving the puzzle about how to bring it all together. And we suffer when it doesn't work.

Starting graduate school, I was way ahead of my peers in teaching experience and skills, and way behind them in philosophy. I had more enthusiasm than commitment in college, and no idea how to manage frustration and anxiety, how to take charge over an assignment or organize my work and time effectively. Teaching had given me the skills I needed to be a proper student, though, so I thrived for a few years.

Nearly everyone has difficulty in graduate school, in one way or another, though every unhappy student is unhappy in their own way. Some of my issues were just personal, including another in a series of disappointing break-ups of long-term relationships. I struggled to develop a dissertation topic, finally settling on the indispensability argument in the philosophy of mathematics and a supportive adviser, Jerry Katz. But then Jerry's cancer returned and he died, terribly sadly, a year into my writing. I still miss him whenever I'm working on my research. I had a jerk for a second adviser, and when he dumped me, I took a long time to recover. I wouldn't have completed the degree had David Rosenthal not held my hand, kicked me in the pants, and pointed me back to the trail. Words cannot express my gratitute to David.

Along the way, I finally met the right woman. We married and had two children. The first was born right before Jerry died, and the second was born just before the jerk told me that I would never be able to finish my dissertation. With Emily in the workforce, I spent invaluable time changing diapers, hanging out in the playgrounds, and generally making a home. I continued to teach at various colleges including Queens College, *alma mater* of both my mother and my grandmother. It was poorly-paid adjunct work, mostly, and I didn't know enough philosophy then to be really good. But students enjoyed my classes often enough, and I was always proud of the amount of material I could march them through.

Finally finishing my degree, I received a post-doctoral fellowship at Hamilton College, and then a tenure-track job here three years later. I experiment with curriculum and teach classes filled with students who actually do the readings (at least mostly, at least eventually). There aren't many philosophers of mathematics in places like this, and I feel some pity and puzzlement from colleagues at conferences. But I couldn't be happier, professionally or personally. I hope never to take my good luck for granted.

Still, I found myself standing in front of my logic class on the morning after the 2016 U.S. Presidential election, failing to introduce relational predicates, and failing to hold back the tears. I had made a big mistake in my life. This isn't where I am needed. Teaching at Hamilton has nothing to do with repairing the world. "I'm in the wrong place," I sobbed. "You don't need me."

That was a tough day for me, as it was for many of us, and I was overreacting. But it is true that most of my students here don't really need me. That's another lesson from my father: in any class, you'll have some strong students, who will learn the work without much help, and some weak students, who need more help than you can give them. A teacher's main responsibility is to the middle of the class. Students at Hamilton are selected because they have all been at the tops of their classes. They don't need me, by definition.

Still, I do have the ability to do some good here. Many of our graduates go off to Goldman Sachs or McKinsey, wielding great influence. If I can help them to think more clearly, to make decisions which

are more grounded in good and thoughtful reasons, then I have some indirect ability to affect the world.

My goal is not to ensure that students retain the subtleties about the semantics we study, or the logic or the metaphysics. Even most of my best students don't fall in love with philosophy or find it really transformative. I can get them to enjoy studying it with me, to come along for the ride and like it. But mostly what they get from me are transferable skills: to read difficult material with confidence; to interpret with charity and clarity; to speak clearly about challenging ideas. That's a little *tikkun olam*.

More importantly, I hope to model a life not rooted in commerce or fear, a life of trading in ideas and ideals rather than material goods. I want my students to see how to resist immediate social exigencies to take a longer and deeper view of what's meaningful in life, a heartfelt and respectful engagement with lasting questions. The content of philosophy is an indulgence, but it's useful just because it's useless, because it's not about relentless consumption. We can't all be philosophers all the time; we need to grow the food, distribute it to the hungry, and care for the ill. But the way we all live is not the way that we have to live, and I hope that I help my students see alternatives. A world with more thinking and less buying and selling and consuming would seem repaired to me, or on its way.

I'm not under the illusion that I can make the world fully according to my ideals of equity and justice. But I do help the students I meet to grow and challenge themselves. And it is only really possible because I really love what I do, both the teaching and the philosophy.

Can good teachers not love their work, and not be emotionally committed to the successes of their students? Can teachers who love their work not be any good? Sure. There are no necessary and sufficient conditions on good teaching. We all have to find our own voices.

Two years ago, I taught a new seminar on Wittgenstein's work. There were nine of us, with varying strengths. The class was an unremitting pleasure. We struggled with the material, challenging and supporting each other. Everyone was engaged, every time we met. It was as good a class as I could imagine, a long way from teaching remedial mathematics at Jamaica High School. I've learned a lot since then about classroom management, curriculum design, and structuring a lesson. But these skills were in the deep background during the seminar. We all just sat around talking philosophy, walking around the Academy, seeking the forms. And there I was, on the last day, crying in front of the class, telling them how much a joy and a privilege it was to study with them, to think about philosophy with students who are interested in seeing a life they don't see much in the outside world. "When I tell colleagues at conferences," I choked out, "that working with my undergraduates is as challenging and rewarding as working with graduate students at top programs, they're skeptical. But in the future, whenever I tell them that, I'll be thinking of you."