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Northfield Mount Hermon Upward Bound Summer Academy 2009
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Sixty-six Massachusetts high school students from Springfield, Holyoke, Turner's Falls, and Greenfield dedicated six weeks of their summer to intense academic enrichment and a constructive residential experience. As one of the eleven tutor counselor interns, my overarching duties to the students were enforcing student's adherence to the strict Upward Bound social standards, helping them maximize their academic understanding, strengthening their study skills, and overseeing their physical and emotional wellbeing. My more specific roles included assisting in teaching Biology 1 and Health and Fitness elective and leading a student activity every day. I also lead a TC group (TC stands for "tutor counselor) comprised of six students who made up my daily two-hour evening silent study hall and whom I checked up on every week to assess their academic and social development. My personal objective was to initiate conversations with every Upward Bound scholar and more particularly encourage a love for learning and self-initiated academic exploring within my TC group.

Because Upward Bound prepares anticipatory first-generation college-going students from low-income families for the rigors of the college application process and the realities of interacting in different social situations in college, we TCs held the students to the most rigorous of standards: always being on time to everything, never using profanity or hurtful language, doing all of the homework all the time, maintaining a positive attitude, never gossiping, and always looking after each other. Each TC was armed with disciplinary "pink slips" on which students who veered from the social and academic expectations would be written up. However, because we wished to foster a positive, enforcing environment, we liberally doled out "TC points" for good deeds and bouts of academic excellence.

Barring special programming, the Upward Bound summer weekday was very strictly scheduled: students wake up at 7am to perform co-op chores and ready themselves for the day; students eat breakfast at 8am and go to class at 8:30am; from 8:30am to 12:35pm, students attend their assigned four core classes that prepare them for the equivalent core classes in their upcoming school year; at 12:40pm everyone gathers for lunch and then community meeting at 1:15pm; at 2pm, students either go to seminar on Mondays and Wednesdays (which for rising sophomores focuses on study and organizational skills, for rising juniors prepares them for the math portion of the SATs, for rising seniors helps them with their college applications) or elective on Tuesdays and Thursdays; at 3:30pm, students attend TC-led activities, which can range from magazine design to study hall to going to the gym; from 4:30pm to 6pm, students have free time to unwind from their busy day; dinner begins at 6pm, after which students can relax some more before getting ready for study hall from 7:30pm to 9:30pm to complete their homework from their classes; after study hall, the students return to their respective dorms for dorm meeting and have lights out at 10:30pm. On Fridays instead of a regular schedule, we had special programming that changed from week to week: Family Day, Boston Trip, Diversity Conference, Senior College Trips. Students left for home on Fridays and returned Sunday

evening for study hall and a movie revolving around the summer theme of classism.

Staff supervised the students at all times. At 7am I would sit in the women's dorm lounge as a resource for students feeling ill and to make sure that the chores were being completed. During meals the TCs sat with the students to make conversation and to monitor language. During student free time, all TCs were on constant alert making sure that no student was ever without an adult. I was on call from 10:30am to 11:40am in case a teacher had a student who needed to see the administration, needed to go to the infirmary, or needed some first aid care.

For my activity, I lead a magazine design class twice a week (I would lead study hall the other two). Initially, the students were intrigued and attended in droves. However, because the activity required more mental concentration than soccer or naptime, attendance sharply fell until I only had a handful of dedicated students determined to learn how to design magazines. Although the spotty attendance, the lack of proper desktop publishing software, and the come-and-go nature of activity wrecked havoc on my ability to lead a progressing class, I am glad to have exposed the students to the world of magazine design and to remind them that behind the magazines they pick up at the grocery store lie countless hours of brainstorm and work.

At first, my TC group evening study hall required some creative finagling to minimize the whispering among a few of the students which prevent the students from doing work. Because the students have four classes worth of homework to complete and only two hours to complete it, it was imperative that they worked diligently throughout the entire study hall. After mulling through some advice from other TCs, I began writing study hall rules on the board:

> 1. Academic discussions in whispers only allowed during the first 15 minutes. Borrow calculators and writing utensils during this time. After this grace period at 7:45 sharp, there will be absolutely no talking, whispering, or mumbling. Pretend you are sitting an SAT and if you made excessive noise you would be kicked out of the exam. Or you are sitting a college exam and if a proctor even suspects you whispering will tear up your test and give you a zero. All questions and concerns go to me only after the first 15 minutes.
> 2. No excessive fidgeting. I will give one warning before I pink-slip.
> 3. Work the entire time. Read when you finish all homework. Excessive time spent not on work (like staring off into space) will warrant pink slips.
> 4. The maximum time allowed on the room computer will be 30 minutes. If you need more time then sign up for the computer lab during break.

I also arranged the desks in my study hall room so that my six students sat around the room perimeter six feet apart; I also strategically assigned the seats so a quieter student buffered the chattiest students. My kids took my newfound authority in remarkably good humor because they knew the rules and I think that they all appreciated the quiet so they could better concentrate on their work. As the weeks passed, my seniors started automatically going to the computer lab and

the library during study hall to work on their research paper. Because quite a bit of the homework assignments began requiring computers more and more frequently, the underclassmen soon followed. By the last two weeks I usually only had one or two students in my study hall at a time.

When I assisted Biology 1, usually I just helped hand out papers, do some grading, and help students during in-class activities and lab. However, the teacher had to take the third week off for AP Biology training so I had the opportunity to cover his class. During that week I taught photosynthesis and cellular respiration and I led an in-class research activity on evolution. Previous to that third week, Biology 1 had covered the most basic of concepts: food chains, the scientific method, the criteria for life. However, I was confident that with enough explanation, each and every high school student can successfully understand the beautiful logic behind photosystems, electron transport chains, high-energy electron carriers, the Calvin Cycle, glycolysis, the Kreb's Cycle, and ATP synthase, even if they never know the processes by heart. The ironic simplicity behind the complexity of nature's processes is what draws me to biology; the elegance of the electron transport chain was what made me fall in love with biology back in my junior year of high school. Of course the students would never have to master the complex chemical details of photosynthesis for the MCAS, but I just wanted my students to be able to mentally break down and understand complex scientific processes by drawing on their arsenal of fundamental scientific principles. I also wanted them to taste some academic challenge that may spur their excitement for learning. I taught with a Powerpoint listing the most basic of the concepts that I elaborated upon in my lectures. I encouraged the students to take careful notes with an open-note pop quiz at the end of each lesson. Teaching cellular respiration was a more difficult task than teaching photosynthesis; photosynthesis is something that students learn about starting in their mid-elementary years, but this will likely be the students' first exposure to the way that cells release energy from storage compounds. The complexity of college-prep-level biology is probably these kids' first exposure to difficult science. My lectures were miles ahead of what the students were used to. Although a few students I taught grasped little of my lecture, some of the students however, seemed to have absorbed most of it, which was exciting. One student who is brilliant but who regularly shuts down in class and often eschews his homework, probably because it bores him, was much so more participatory during my lectures and outshone all the other students in the class, which gave me hope for his future.

The day I finally realized the terrible state of the public education system was the day I helped a student with her algebra II work during study hall. Although this student is going into her junior year of high school (honors algebra II at that) she did not know basic algebra I material like how to write an equation for a line when given two points or how to plot a graph when given a basic y=mx+b equation. I never realized until today how much children really are being left behind in certain parts of the country. This student is not mathematically incapable—she took readily to my instruction—her school simply never taught the fundamentals. I have no idea how her school prepares their students for the math MCAS (Massachusetts' standardized test) because I have no idea how in the

world any student can pass an algebra I assessment without knowing how to write an equation in slope-intercept form. This student was struggling to keep up in her math class this summer and knowing that because of me she finally understands how to write and graph simple equations, use invisible numbers, and simplify a square root was both heartwarming yet poignantly heartbreaking.

What frustrated me throughout the six weeks was the amount of instruction that some of these students missed out on in their high schools. Because I went through a public school system, I take my excellent education for granted more than someone who went to an expensive prep school. Although basic arithmetic, reading, comprehension, and critical thinking abilities seem like obvious skills that any school would teach (what else would the students spend their requisite 180 school days learning?), it has quickly become clear that at many of the public schools in the western Massachusetts area shirk their duties as educators. Trying to bridge chasmic knowledge gaps in six weeks frustrated me every day, particularly because I could clearly see how clever so many of the students are but never knew their full potential because their schools simply did not care enough to establish high academic standards. Hopefully the students I help walk back to school with their arsenals of fundamentals a little fuller than when they walked in.

Despite its exhausting 16-hour workdays and nonexistent pay, I loved working at Upward Bound. This is the first time I have felt so useful in my short life. Although many aspects of teaching and dealing with teenagers frustrated me, I know that I am lucky that my first foray into the world of education is with a group of dedicated, engaged, largely well-behaved students, and that high school students have emotionally and mentally matured enough to understand how to behave rationally and responsibly, even if they didn't do so all the time. I hope for the very best of opportunities to come the way of these children, and that I hopefully helped equip them with the means to recognize and use these opportunities.

My TC group: Tim, Terrell, Nicole, Jazzynett, Sarah, me, Ellanje.