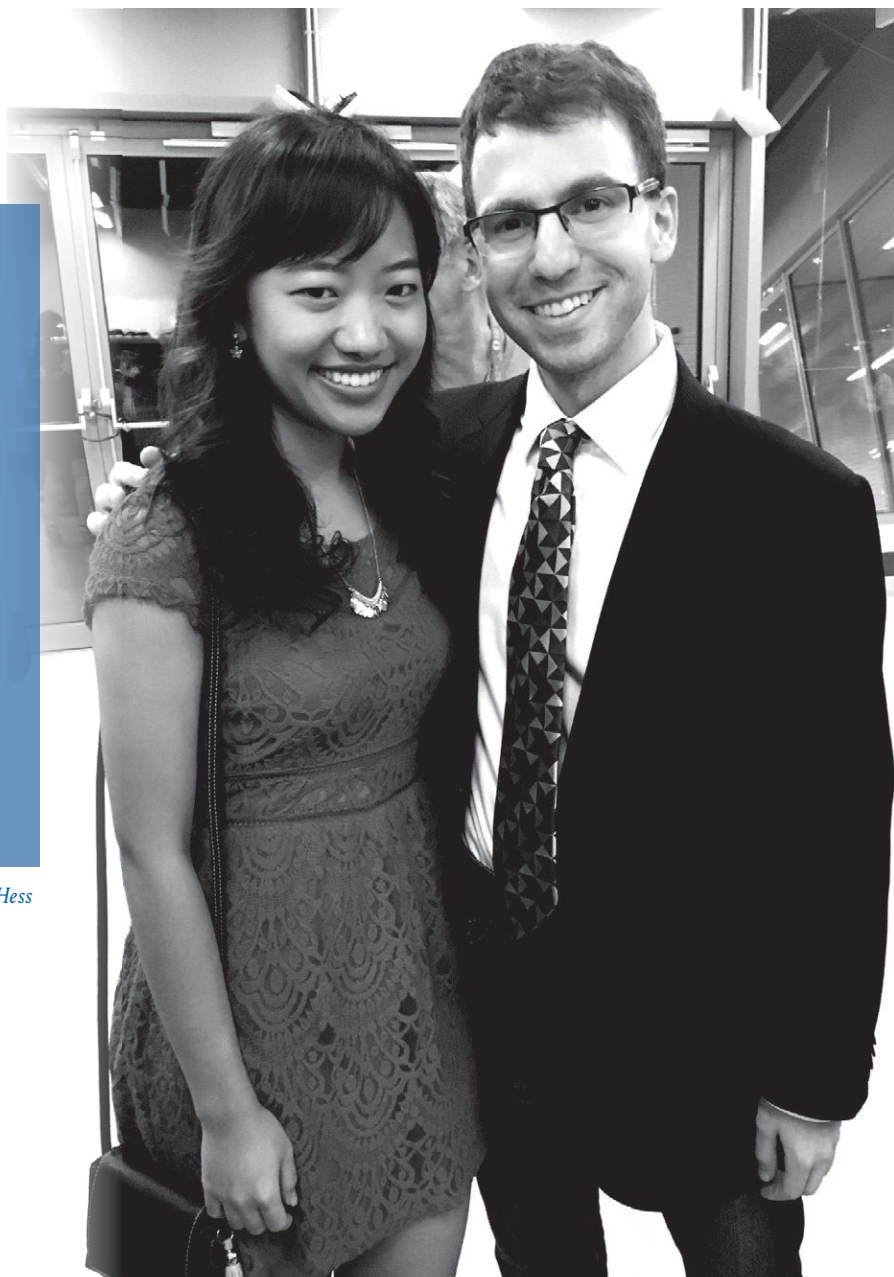


Grandmasters
and why they
chose education
over a full-time
playing career

By **WIM YUANLING YUAN**

The author with GM Robert Hess



GATEWAY TO THE IVY LEAGUE

They were the child prodigies, the rising stars, the future of chess. They grew up breaking one record after another and were the source of their nations' pride. Their eyes sparkled when they spoke about the game and the corners of their mouth curled ever so slightly when they reached across the board to deliver the fatal blow. They loved the game.

Yet, at a certain point, one by one, they quietly stepped away from the spotlight. They stopped climbing Mount Everest. Instead, they walked towards a set of doors that led to a different path. With the same pair of hands that used to send pieces flying across 64 squares in one-minute bullet, they pushed open the heavy metallic gates that stood before them, the gates to the prestigious Ivy League universities, places that promised the highest caliber of education in the world.

Who were these individuals? Given their early success, why did they not pursue a professional career in a game that they loved? How did they get invited to study at an Ivy League school, where acceptance rates are as low as 5 percent? Most importantly, when they set foot on campus, did years and years of chess experiences help them succeed in this highly competitive academic setting? Or was it all a waste of time?

THE DECISION

I first met GM Robert Hess (Yale, class of 2015) when I was a wide-eyed, newly-admitted freshman on Yale's campus, searching for the building that housed the Yale Chess Club. When I arrived, he was already deep in conversation with a group of chess enthusiasts on campus who were eager to hear his adventures. Robert greeted me with a simple "hello" and nothing more. There was no "welcome-to-campus-let-me-know-if-you-need-any-help" kind of enthusiasm that I had experienced from other upperclassmen. "Well, that's a mighty GM for ya," I remember thinking.

Back then, every grandmaster I knew—which were not that many in the Canadian chess community—had gone "pro" at some point in their youths at the expense of their education to become the cream of the crop in this game. They didn't necessarily forgo education—just that they didn't really put much effort into it. Those who did never became grandmasters.

I, too, understood that trade-off. At the age of 14, I took pride in being the youngest female in Canada to have achieved the women's international master title. But once I started high school a year later, the international baccalaureate program (a rigorous curriculum intended to condense four years of high school plus the first year of college academics all into four years of high school) became so demanding that I could no longer consistently play in tournaments in order to advance my title. Academic excellence was my top priority and I valued being a well-rounded individual more than anything else.

Robert was the first person I met who had conquered both worlds. He earned his grandmaster title at the age of 17 and was one of the few top players in the U.S. who had qualified to represent the country at



GM Parimarjan Negi: The Stanford student realized that there was a whole world outside of chess waiting for him.

the world chess Olympiad—all while keeping up with the rigorous curriculum at Stuyvesant, one of the most respected public high schools in New York City, and ultimately landing a highly-coveted spot at Yale. No wonder I was intimidated upon our first meeting.

When I confronted Robert about my first impressions of him two years later, we both laughed. “I can’t believe you thought I was intimidating!” he cried in protest. Indeed, it took several years of having brunches together in Yale’s gothic-styled dining hall, playing side-by-side at a Pan-Am together, and working with him at a few tournaments for me to come to know him as a down-to-earth guy who was simply exceptional in everything he pursued.

“I never wanted to be a professional chess player,” Robert told me. “I’ve always had many interests and wouldn’t be fulfilled by just focusing on one thing.” To him, balancing chess and academics was “a nice challenge.” In addition to the high standards he set for himself in these two incredibly demanding subjects, Robert was also the captain of his high school’s junior varsity football team and wrote for the school’s official newspaper. No big deal. He needed the dynamism to strive.

Then I met others like Robert.

During my senior year in college I began hearing rumors that our rival institution, the “OK-school-in-Cambridge-which-shall-not-be-named,” had admitted a freshly-minted army of chess masters. Amongst them was GM Darwin Yang (Harvard, class of 2019), who abandoned Texas for an East Coast college because he actually “preferred the cold.”

Scoring his first international master norm at the age of 13 and his first grandmaster norm two years later, Darwin saw the potential in himself. In seventh grade he began to weigh his options. “It’s appealing to be able to devote a lot of time to something I love,” he told me. Had he wanted to become a professional chess player, this would have been the perfect time to bid his schoolteachers a long farewell. He was young, fearless, and had the momentum going for him. He mulled over the decision for over a year.

In the end, he decided to keep his options open. Like Robert and me, he yearned to be a well-rounded individual who, outside of chess, could talk about fantasy football with boys at school and also understand the laws of thermodynamics. As soon as Darwin decided to commit to his dual existence, he was all in. “I didn’t want to go in half-heartedly,” he sternly explains. “If I am going to go down this route, I am going to be a GM *and* go to Harvard.”

Another grandmaster took a slightly different approach. It was never

an option for Daniel Naroditsky (Stanford, class of 2019) to walk down life’s path without a high school diploma. Thus, it wasn’t until after the graduation ceremony, scroll in one hand and long-held grandmaster title in the other, that he was confronted with the decision to “go pro or not go pro.” Unlike Robert, Darwin, and me, who saw chess as a love affair, Daniel was the kind of guy who could have been happily married to chess—if it weren’t for the realities of a marriage. Asked about any other non-academic commitments in high school and he responded, “I was involved in chess, in chess, and *in chess*.”

However, through his introspection, Daniel recognized that, although chess had provided him tremendous satisfaction and fulfillment over the years, he wouldn’t be able to handle the emotional stress involved in playing the game for a living. He was highly competitive and knew that his pain tolerance for losses was not conducive to a professional career. It was Daniel’s maturity and self-awareness that put him on the path to Stanford.

On the other side of Stanford’s campus resides a grandmaster who played professionally for many years before calling it quits. GM Parimarjan Negi (Stanford, class of 2018) was India’s most promising child prodigy, being the second

youngest player to be crowned grandmaster. Negi grew up focusing on chess, and with his early displays of talent, had planned to make a career out of it all along. Upon the completion of his high school studies, which in his case were quite lenient and not very time consuming, Negi was rated around 2650 FIDE and ranked in the top 100 in the world. His goal was to break the top 20.

Those 80 spots were not easy to climb. For the first time in his life, Negi felt as if he had hit a ceiling—that somehow, hard work was no longer directly proportional to success. Over the next three years, his ranking oscillated between top 70 to 100 and his progress plateaued. He became discouraged and grew increasingly unenthusiastic about the game. “There weren’t that many new things to learn from chess,” he told me with a sad look on his face. “Luckily, around this time I spoke to my friend Chaitanya Vaidya who went to the University of Texas at Dallas (UTD) and learned that there was another possibility—education.”

Immediately, Negi realized that there was a whole world outside of chess waiting for him. He was excited about what Chaitanya had described and rediscovered his childhood curiosities about the sciences and other subjects. He began conducting his own research of American universities—the start of his journey to Stanford.

“I never wanted to be a professional chess player,” Robert told me. “I’ve always had many interests and wouldn’t be fulfilled by just focusing on one thing.”

THE JOURNEY

It only seemed fitting that chess players would devise a plan to make things work. The eight-year-old me loved sketching out a day-by-day timetable on my little bedroom whiteboard. From 3 p.m.-4 p.m.: monkey bars; 4:30 p.m.-5:30 p.m.: homework; 7 p.m.-8 p.m.: blitz on ICC. My father always laughed that I spent more time writing up the schedule than actually sticking to it. But having a calendar of my own definitely helped me stay within the confines of a well-balanced childhood.

Robert grew up with a self-imposed rule: he would spend a maximum of only one day of the weekend on chess. He carved out the remainder of his time for other interests such as basketball and sleepovers.

Similarly, Daniel began high school with the principle that he would be missing no more than three consecutive days of school at a time. After spending weeks away from the classroom throughout elementary and middle school to accommodate marathon-styled tournaments like the

World Youth, Daniel reflected upon his straight 'B's and realized that "it wasn't impossible to make small sacrifices in order to achieve long-term success in both worlds." Lengthy international tournaments were reserved solely for Christmas and spring breaks, when he was allowed to devote more time to his favorite game guilt-free. When it came to studying, Daniel practiced consistency by setting aside an hour or two everyday for his textbooks, though he confessed, "Sometimes I play bullet to procrastinate from studying for tests."

The penultimate year of high school marked the final sprint. Juniors across the country were touring colleges, taking SAT exams, and squeezing their creative juices on college admission essays. No one was exempt from this process, not even our grandmasters.

Yet chess was definitely the top reason why the admission officers fell in love with these applicants. "I didn't give Harvard a reason not to take me, but chess was the reason why they took me. It made my application unique," Darwin described to me, referring to the Ivy League's search for exceptional individuals amongst a pool of well-rounded, highly-qualified high school students. Moreover, these institutions have an

affinity for those who have a fired-up passion about something. Any- thing. "Chess helped me write a college admission essay that was filled with passion," Negi said, reflecting upon the 500-word piece that convinced Stanford he was the one.

Robert agreed. His college admission essay was titled "Chessing Fate," a pun on both his parents' names—C. Hess. Johns Hopkins awarded him a scholarship and wrote him the following: "We are in awe of your achievements as a chess grandmaster." Unfortunately, Johns Hopkins was unsuccessful in wooing Robert, as many other elite universities also had their eyes set on the all-star football captain grandmaster, including my alma mater, Yale. Who could blame them?



GM Daniel Naroditsky: "Don't decide to cast out chess or education in your life completely."

THE COLLEGE EXPERIENCE

As a young boy, Darwin gazed upon Harvard's gates during a visit with his father and was immediately drawn to its aura. To him, Harvard represented worldliness, greatness, and a community with a strong sense of purpose. A current rising junior, he decided to major in history and minor in economics because "they allow us to better understand and improve the world in some way by drawing lessons from the past and applying them with a rigorous methodology." He, too, hopes to change the world someday.

Though the polymathic personality type has its merits, it also created some troubles for Robert during his time at Yale. A 10th grade internship at Fortress Investment Group—a New York City-based investment firm that manages \$70 billion in assets—naturally made Robert curious about the world of finance. "Perhaps I could major in economics," his freshman-year-self thought. So he took a few economics courses along with an assortment of others in the true liberal arts fashion. His freshman year

coursework included Russian, because he "wanted to know what people were saying in chess"; a literature seminar called "Fakes, Fraud and Counterfeits"; and a psychology class titled "Moralities of Everyday Life." Quickly, he realized that economics was not for him. "Economics loved me more than I loved it," he told me. Well, that kind of relationship wasn't going to work. For the first two years at Yale, Robert was a "Jack-of-all-trades, master of none."

Junior year, Robert showed up at the dean's office and announced his plan to major in history despite not having taken a single class in the subject matter. His residential college dean thought he was crazy; I thought he was crazy. His response? "I always like a good challenge."

Never question Robert about what he plans to do with his degree in history. He would tell you that his major is applicable in conversations he has every single day because we live in a world that is shaped by historical events. Everything, from large issues such as the American healthcare system to small ones concerning the piles of black garbage bags on the sidewalks of New York, should be placed in historical context.

"History is inescapable and pertinent to everyday life," Robert explained calmly. "It helps you question the way things are."

Perhaps chess players are the types of people to be drawn to the bigger picture, such as the origins of the Sicilian Defense or the choice of 64 squares. My relationship with economics at Yale was not as one-sided as Robert's was. When I graduated from Yale with a bachelor of arts degree in economics last summer, my favorite classes were European economic history and American economic history, where I learned about how modern day social security started from Queen Elizabeth's "Poor Laws," how Britain industrialized sooner than its neighbors, and why North America—endowed with neither fertile soils nor good weather—was able to outstrip its Southern counterpart in long-term growth. By the time I graduated, I had taken five courses in the art history department, ranging from Chinese landscape paintings to Greek art and mythology.

We all loved learning for the sake of learning, hungry for knowledge that would satiate our curiosities about the world.

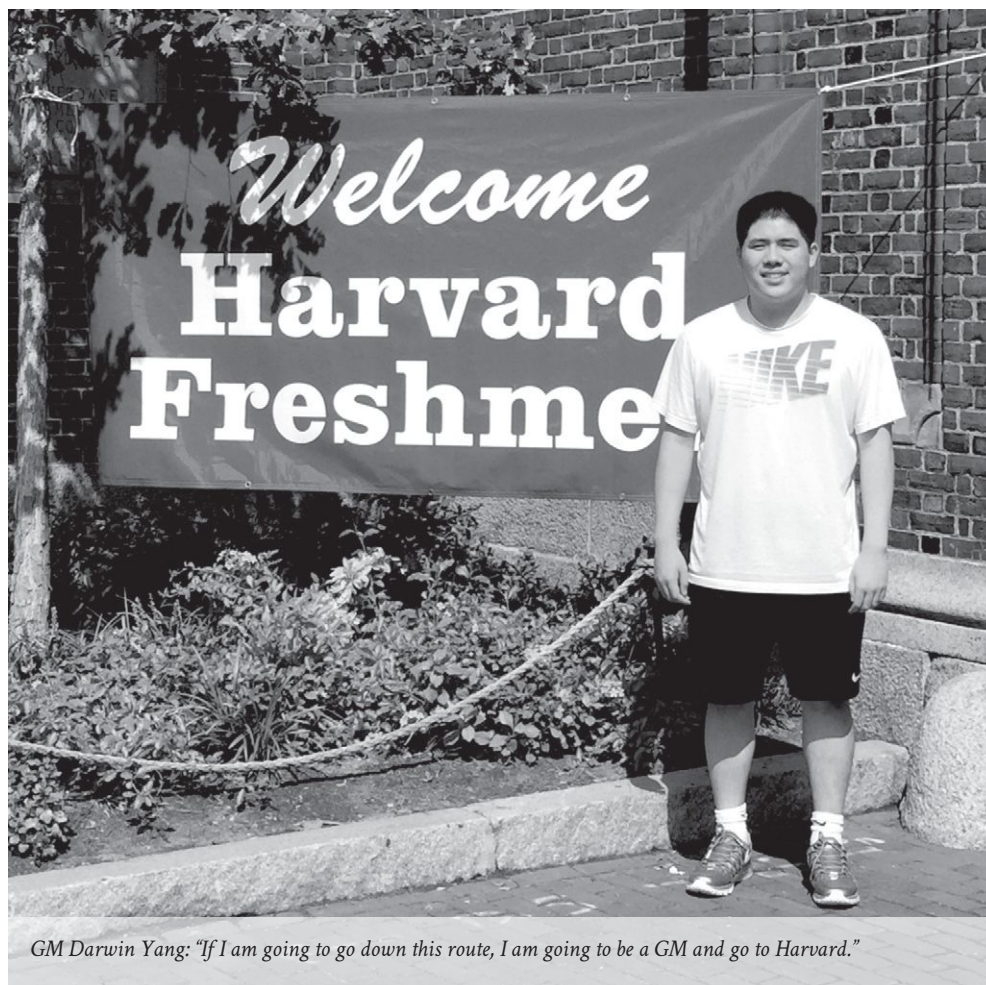
On the other coast, our peers at Stanford were inspired by a tech-oriented culture that promoted innovation, creativity, and problem-solving. It was love at first sight for both Negi and Naroditsky with Stanford's introductory computer science sequence. Negi, now a rising senior, was immediately sold on computer science (CS) as his primary field of study when he arrived on campus. According to the Indian-born grandmaster, "CS is a very logical choice for chess players because it's all about problem-solving."

Daniel, a year younger, chose "symbolic systems," a fancy term for an interdisciplinary major that concerns psychology, linguistics, and computer science. "It's basically a major for people to dabble in several things but not focus on any one of them—like me," he joked.

Outside of academics, there is little time for other pursuits. "When I set foot on campus freshman year, someone told me that you can only choose two out of three things: a) academics, b) socializing, or c) sleep. I chose academics and sleep." Negi was only half joking. The standard is very high at these institutions and all students strive for excellence, making it even harder to do well relative to others.

But we still try. Amongst all the distractions, we still try to find time for the game we all love. Perhaps most impressive of all is Daniel, who recently competed in the U.S. Championship and finished the tournament with a great performance. He attributes his quick, last-round draw against Wesley So to CS 103, "mathematical foundations of computing," which is notoriously difficult; he had a 20-hour problem set due the day he returned to campus. Missing a week of lectures and assignments is almost suicidal at a place where classes are typically small and graded on participation.

Robert found creative ways to weave chess into his busy life at Yale. Every year, he played a 50-board simultaneous exhibition in the heart of Old Campus, Yale's freshman quarters. Students who passed by were awestruck, astonished that someone could play so many games of chess at once. "Whoa! How does he do it? Does he not get confused? How can he concentrate?" they wondered out loud. But his attempt to raise awareness for the game didn't stop there. While still a student, Robert was a regular guest lecturer in "exploring the nature of genius," a class taught by Yale



"When you've had the experience of grinding for five hours just to hold a draw, you don't get frustrated with several hours spent debugging a program." ~GM Parimarjan Negi

Professor Craig Wright. Pacing before his peers, Robert discussed concepts such as pattern recognition, memory, and the interconnectedness of unexpectedly related concepts. The big finale always included a blindfold match, to which the spectators would “ooh and aah” in excitement. He was known around campus as “the chess grandmaster” and made the game seem exceptionally cool.

Darwin spent most of his freshman year breaks at tournaments trying to cross the 2500 FIDE mark for the official grandmaster title. Since then, he has devoted more of his time to other explorations such as the finance club and the *The Harvard Crimson*, the university’s 144-year-old daily student-run newspaper.

My involvement with chess in college occurred in reverse chronological order. Freshman year, I was overwhelmed with what the university had to offer and barely touched a pawn. I became involved with the student government, the *Yale Daily News*, and the Women’s Leadership Initiative. Sophomore year, I co-founded a startup called SubLite with one of my best friends and source of inspiration, FM Alisa Melekhina, a student at Penn Law at the time. However, the more time I spent away from the board, the more I felt a piece of me missing. There was only one cure to my heartache: by the end of college, I had played in several local tournaments, one Olympiad, and one Women’s World Championship.

TAKEAWAYS FROM CHESS

“When I think about chess, I see it as a microcosm of life,” Darwin claimed. I couldn’t agree more. I see traces of chess and the lessons it taught me in everything I do. The grandmasters collectively identified a few key transferable skillsets from chess that have helped them succeed in life and especially, in a higher education setting like Yale or Harvard.

Research has shown that the main non-cognitive trait that relates to long-term success is grit. Chess teaches us how to win and to lose, how to emotionally deal with the highs and lows and how to get back on our feet after a painful loss. The nature of the perfect-information game with zero element of luck also instills in us a strong sense of responsibility and ownership of our actions. “In chess, there is nobody to help you but yourself,” Daniel pointed out. Indeed, a strong mentality is useless if there is no subsequent action plan.

I remember receiving my first ‘C’ ever on a midterm freshman year and only allowing myself 15 minutes of grief and tears before I mustered the courage to speak to my teaching assistant about an improvement plan. As the semester progressed, my ‘C’ became a ‘B’ and eventually an ‘A’.

When Negi first began his studies at Stanford, he was a “complete outsider”—as if a 1600-rated player tried playing in a tournament with masters. “I was at the bottom of my class,” he told me. “But I remembered how I used to pour hours and hours into studying the game and eventually got better. When you’ve had the experience of grinding for five hours just to hold a draw, you don’t get frustrated with several hours spent debugging a program.” The task of buckling down, doing the work and patiently waiting for the results was no longer daunting. He had done it before. Three years later, Negi strolls comfortably in and out of the computer science department and is even considering a Ph.D. in the field.

“Chess is meant to capture the variability of life,” Darwin told me. “It teaches you how to problem-solve in real-time,” Robert added. With *The Sports Quotient*, the college-sports editorial start-up that he co-founded during college, Robert was in charge of finding the optimal solution to challenges that the organization faced on a daily basis. “Like chess, there is no solution manual so you simply have to figure it out.” Daniel also expressed his concerns with classmates on campus who become perplexed at the sight of a problem they don’t know how to solve: “If my bike breaks, I Google how to fix it. It’s not that hard. I’m surprised how many people don’t even do that.”

Overall, the countless years of chess training and tournament experiences have equipped us all with a toolbox ready to tackle life and anything we choose to pursue. As Darwin summarized eloquently, “Chess teaches you the approach to life—that you must prepare yourself adequately, be disciplined during the game, think analytically through all aspects of the problem, and be ready to confront an infinite amount of possibilities.” He has applied this methodology to his studies at Harvard, where writing an essay entails an extensive planning session,

reasoning through the arguments and making sure it’s logical before he even composes a sentence. He has vowed not to sleep through lectures nor skip readings for the fear of missing a crucial detail. “If you miss a line in your opening preparation, you can get totally burned. Chess taught me to approach everything with full commitment.”

Chess was definitely the top reason why the admission officers fell in love with these applicants.

ADVICE FOR YOUNGSTERS

“What would you tell a young, aspiring chess whiz who is at life’s crossroads, considering the option of going all in?” I asked each of the four grandmasters, seeking their words of wisdom.

“Go to school. It is very difficult to make a living playing chess. I would recommend keeping your doors open. If you can afford to explore, then attending a chess school like UTD or Webster could be a viable option. School teaches you so much more than academics. You can get the best of both worlds.”—GM Robert Hess

“Figure out for yourself if chess or academics is your true passion, or, in my case, both. If you love chess and get the sense that this is really the place for you, then you will know. Don’t get stuck on the idea that this is the *choice* of your life. If you choose chess and things change, there is nothing to stop you from going back to school. Just evaluate your situation, see how it goes, and keep reevaluating—like chess.”—GM Darwin Yang

“It’s OK not to be sure. Don’t rush to make a decision. In our society there is an unspoken pressure to always have your [stuff] together. It is very possible to balance chess and school and do well in both. Don’t decide to cast out chess or education in your life completely.”—GM Daniel Naroditsky

“Explore a bit more on your own. The Internet is so vast these days. Before I started Stanford, I watched these finance courses online. Looking back, I wish I started exploring other subjects sooner. If you are studying chess all the time, you will burn out, so it is important to have a different hobby or interest.”—GM Parimarjan Negi ♦