

Ramona Schindelheim, WorkingNation editor-in chief:

You're listening to Work in Progress. I'm Ramona Schindelheim, editor in chief of WorkingNation, Work in Progress, explores the rapidly changing workplace through conversations with innovators, educators, and decision-makers people with solutions to today's workforce challenges.

Enmanuel de la Nuez, Marcy Lab School graduate

Marcy Lab made me fall back in love with education and learning new things.

Ramona Schindelheim, WorkingNation editor-in chief:

Enmanuel de la Nuez's mother taught him to read before he even started school in the Dominican Republic. In 2010, when he was 10 years old, he moved with his family to the United States. He didn't know English at all, but in New York, he was able to speak Spanish as he learned the language. By middle school, he already had an inkling of what he wanted to be. Something like biomedical engineering seemed appealing. His first introduction to computer science was in high school, in a class about developing algorithms.

Enmanuel de la Nuez, Marcy Lab School graduate

The first problem in the class was coming up with an algorithm to determine if a word is a palindrome. So if all the characters are the same in reverse as they are forward. And I remember having a lot of trouble with that. So the first exposure that I had to computer science made me think computer science is not for me.

Ramona Schindelheim, WorkingNation editor-in chief:

Before Enmanuel graduated high school, he heard about the Marcy Lab School in Brooklyn. It's a one-year alternative to traditional college, a program that gives students not just the skills, but networks and leadership training to build a career in tech.

Enmanuel de la Nuez, Marcy Lab School graduate

The Marcy Lab School application kind of changed my mind about like what it would be like to be working in tech. The questions in the application were more about how would you use technology to help your community? And that made me interested in giving it a second chance, knowing that it was something that I could apply directly to helping people as opposed to something that's purely abstract in school.

Ramona Schindelheim, WorkingNation editor-in chief:

There was another aspect to the Marcy Lab School that was appealing. It was free.

Enmanuel de la Nuez, Marcy Lab School graduate

A big part of my decision to not go to college was about the money. I was kind of like one of the older siblings in an immigrant household. I very aware of the financial burdens that my family was dealing with. And when it came time to go to school, I was hyper aware of [inaudible 00:02:20] and me not being able to meet all of my [inaudible 00:02:24] of school would mean for my family. So when this program came around where it wouldn't mean me burdening my family with any additional financial constraints I was very happy to have found it.

Enmanuel de la Nuez, Marcy Lab School graduate

The program lasted a full year and a typical week, Monday through Thursday will be pretty similar. We will start out the morning by meditating and writing in our journals. We would then follow that up with a lecture. And after lectures, we would have study time where the other fellows and I would collaborate with each other and sharing and understanding different topics. We will follow that up in the afternoon with another lecture. And after that lecture more engagement with the material. Friday was the day primarily devoted to our leadership and development curriculum.

Ramona Schindelheim, WorkingNation editor-in chief:

The program was both intimate and collaborative, something that appealed to Enmanuel. He also got weekly coaching sessions with the program manager.

Enmanuel de la Nuez, Marcy Lab School graduate

We will talk about more personal topics in a confidential setting, such as our own personal strengths and areas of growth, our family situation.

Ramona Schindelheim, WorkingNation editor-in chief:

And they discussed anything that might impact his ability to get the most out of the program. Of course, they learned the technologies to. JavaScript, Python, frameworks like React and how to build applications. But the school wants students to be not just great software engineers, but good, critical thinkers who can perform under pressure with grace. And something very important. Marcy Lab School connected him and his fellow students with opportunities to start their career in tech. Enmanuel's opportunity was an apprenticeship at Asana, the office collaboration software company.

Enmanuel de la Nuez, Marcy Lab School graduate

And the apprenticeship is very much aimed at converting apprentices to full-time engineers. And they try to make it as real as the actual full-time position is.

Ramona Schindelheim, WorkingNation editor-in chief:

At the end of the six-month apprenticeship, he was asked to stay at Asana as a full-time engineer. That's an introduction to the field that students in traditional colleges don't always have.

Enmanuel de la Nuez, Marcy Lab School graduate

Applications to be a software engineer, usually have a lot of requirements. Some of them being a college degree, which none of us had. Other requirements being a lot of different technologies that no one could expect anyone to completely to check all of the other check boxes. I can definitely understand the feeling that it's hard to get started and find that first opportunity. I think Marcy Lab helped a lot with the first step. Not only because they were able to connect us to recruiters directly and engineer's of those companies, but also because we learned a lot about how to navigate those requirements and the mindsets that the people looking for applicants have.

Ramona Schindelheim, WorkingNation editor-in chief:

And now that Enmanuel started his first job in the industry. He's mentoring his younger sister in computer science.

Enmanuel de la Nuez, Marcy Lab School graduate

I think what's special about the Marcy Lab is that it has the power to change our relationships with learning. I was always somebody that enjoyed going to school for the sake of learning new things, but that environment of kind of not having a direction of what to do when school ended taking classes that I like when relevant to my interests, having the same curriculum as everybody else and the grading system that didn't always bring out the best in people, those things getting appealed to me and made learning a lot less fun. Marcy Lab made me fall back in love with education and learning new things. I was able to be so independent, I was able to explore my relationship with a growth mindset and what my potential as a human being means for me. There's nothing out there in the world that I couldn't learn and maybe even do as a job if I set my mind to it.

Ramona Schindelheim, WorkingNation editor-in chief:

Enmanuel, now 21, says he wants to use technology to help change his community for the better. And he's not the only Marcy Lab school student with a sense of purpose beyond getting a good paying job in tech. Marcy co-founder and executive director Reuben Ogbonna, explains that the school's mission is to propel underestimated young adults into purpose driven careers in a high demand field.

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

If you hear that mission, it might sound similar to the mission of generally what higher education or college is supposed to be in this country. The Marcy Lab School was founded and based on my experience as a public school teacher, working in incredible schools in low income communities that have a strong track record of sending students off to college each year. I was a Dean in these schools, a teacher, assistant principal. And I saw just how often high-potential hardworking, highly motivated students go off to college each year only to find themselves in a ton of debt. And under-prepared for the types of jobs that they deserve, the types of jobs that allow them to build wealth, move into leadership positions in their community, and really change things for the better. That happens much less often than they like to admit in this country based on how much college has changed in the past 30 years.

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

In short, I thought about all of the students that go off to college in this country and leave with that and no degree. In fact, across the nation, 34% of black and brown students who go into college each year will graduate in four years and that's unacceptable. A little more than half of all black students who take out student loan debt will default at least one time in their lifetime on that student loan debt. Again, unacceptable. I think that it should be the mission of any post-secondary institution to put students in the position to build a meaningful career for themselves so they can take care of themselves, their families and their communities.

Ramona Schindelheim, WorkingNation editor-in chief:

Your program is focused on low income students. Low-income students of color, low income students of all backgrounds.

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

Yeah, we're targeting those students who have disproportionately been left behind by the traditional higher education system. By the data, low income students, those students who were [inaudible 00:08:32] eligible and black and brown students, immigrant students have outcomes from traditional

higher education institutions that leave a lot to be desired. And so [inaudible 00:08:43]. We're trying to combat inequities that took decades, centuries even to solidify. And so we're targeting those students who we believe have so much potential and are so deserving of building wealth and stepping into meaningful careers.

Ramona Schindelheim, WorkingNation editor-in chief:

When you look for your candidates, you emphasized three words, curiosity, discipline, hard work. How does that help you identify the right candidate for your school?

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

I'm thinking about what are the character traits that are likely to lead to success in career fields that are going to change so often in the future, career fields that don't yet exist, no matter what one is training for in this moment, no matter what skills or technologies a young person is learning in 2021, it's a fair assumption to make that those technologies will be outdated by 2031, revolutionized by 2041. And so we think about instead of selecting for the antiquated metrics that typically drive a higher education admissions process. The SAT, GPA's, et cetera, how do we come up with our own unique measures of curiosity, discipline, hard work in many of us, but those very [inaudible 00:09:55]. One curiosity, we were looking to cultivate students love of learning, such that they can stay ahead of the learning curve as technologies and industries change.

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

Those curious students, that curiosity can be expressed in a number of different ways based on their interests, students express curiosity, based on a YouTube channel that they started when they were in high school, the video game club they spun up when they were first exposed to Fortnite. It can be the piano, the guitar, the cooking class, they taught themselves. But there's something about this curiosity, this insatiable thirst for learning that is going to give us an indicator that when a student gets into the tech sector or make it into business or marketing, they won't be satisfied with the position that they're in, that they're always going to be looking for the next opportunity to grow and advance their own skillset. Discipline is so important in every field and particularly in the engineering fields that we're focused on in this moment, our colloquial definition of discipline is just the willingness to forego the thing that you kind of want right now in order to pursue the thing that you really really want later.

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

And so discipline shows up in the classroom in small ways, such as making sure that when you submit your assignment, that the alignment and the syntax of your code is just as beautiful as what it outputs. And that type of work habit that one comes in with and we continue to cultivate over the course of a year. What that shows up as is a really conscientious candidate in the interview process. It shows up as someone who trusted once they land on the job, it shows up as someone who takes learning very seriously and seriously enough to really obsess over the details. And then lastly, hard work, because that can show up in a number of different ways that doesn't necessarily get highlighted in a traditional college admissions process, the candidate or the applicant that comes to the Marcy Lab School and says, "Hey, I started off at this restaurant as a bus boy, and I worked my way up to an assistant manager."

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

How much hard work and hustle does that indicate that you have? The person who has a large family and managed to maintain school and their family responsibilities. That type of hard work is [inaudible

00:12:01] that we value. It's our [inaudible 00:12:03] that a student who's willing to work that hard on behalf of their family, themselves, their community, their interest in school. It's going to translate when they get onto the job, when they get into this really rigorous curriculum that we have here at the Marcy Lab School.

Ramona Schindelheim, WorkingNation editor-in chief:

There's a huge demand for young men and women, older men and women in the software engineering field. What kind of practical hard skills are the students at Marcy learning?

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

We're preparing students for a number of different career fields, software engineering, being our first academic major. When we think about the types of skills that we want to prepare students with, it's the skills that age really well in a rapidly changing economy. And so not everyone is going to be a coder, but everyone is going to have to interact with software that causes you to have to think like an engineer. You think about tools like Airtable replaces what Excel used to be.

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

A tool like Notion replaces what Microsoft Word used to be in these new platforms that modern day companies are running on require you to have to think about how the decisions for how you arrange information will grow as the organization grows. And so every person who comes through the Marcy Lab School learns to think like an analyst, every person who comes through the Marcy Lab School learns how to think like a data architect. And as you specialize in a different career field, you go really deep into the fundamentals of software engineering if that's your major of choice or business analytics and marketing, if that's your major choice. But we think about what are those things that are universal and how can we embed those mindsets in every single course concept area?

Ramona Schindelheim, WorkingNation editor-in chief:

You could enroll in a college and become a computer science major. What makes this program different than what you might learn in college?

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

Colleges aren't well equipped to keep pace with the changing standards in technologies, the tech sector in software engineering in specific. By the time the textbooks go to print, oftentimes companies have moved on to the newest technology. And so the challenge that we have to answer is, how do we ground students in those principles, those fundamentals that are long lasting while being able to expose them and help them develop proficiency in the skill sets and the technologies that employers need today. And so if you look at the course titles or the unit modules at the Marcy Lab School, they look really similar to computer science course titles at a traditional college, whether it be database fundamentals or object oriented programming or scalable front ends, but we're in touch with industry professionals on a regular basis to make sure that we're teaching those fundamentals in the context of the tools that they will use on the job.

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

And so what that means is when our students get on the job into internships and into the industry, they're able to be productive really, really fast in comparison to their peers who went to traditional

colleges. So when I think about our fellows who have graduated and they're now working as software engineers at companies like Squarespace or Spotify or Weight Watchers, or the New York Times, or JP Morgan. These folks who graduated from the Marcy Lab School are working alongside of folks who graduated from Harvard and Cornell and Stanford and UVA and Rutgers. And they're just as productive if not more because those institutions as lauded and as impactful and historical as they are, don't have the infrastructure to be able to ensure that the students who are studying computer science there are leaving well-informed with the standard practices and tools that the industry are using today.

Ramona Schindelheim, WorkingNation editor-in chief:

Enmanuel was telling me that the leadership and personal development part of the curriculum was very important to him. Why do you include that?

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

Our students aren't coming to the Marcy Lab School looking for job training. They're not coming to the Marcy Lab School looking for a fast track into the software engineering field. They're looking for a college experience. The students that we're serving otherwise would be attending lesser selective two year or four year colleges. And they're coming to the Marcy Lab School, yes, because they're excited about the possibility of kicking off their career at a really exciting place at a high salary. But they're looking for the things that we got out of our college experience, they're looking for the lifelong friendships, they're for the opportunities for self-actualization, looking for the confidence boost. They're looking for the opportunity to read interesting books and talk about societal issues around the table with their peers. And so if we are truly looking to create an alternative to college, it cannot just be about learning to code and building apps. But we have to think about building holistic well-rounded leaders, who can be confident in themselves when they walk into these new spaces and then demand the change that they wish to see in the world.

Ramona Schindelheim, WorkingNation editor-in chief:

Enmanuel says that there's also a certain intimacy to how the program is designed and it made him better connect to his own Latino and African roots. Is that an important component to the program?

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

100 percent. You think about when we're successful, we're taking students who have existed in beautiful communities of color, immigrant communities and preparing them to live a large portion of their lives in cultures, in companies, in buildings where in many cases they are the only person who look like them, the only person who come from backgrounds similar to their own. And so it's important that every student who comes through the Marcy Lab School knows that they truly add value to every room that they enter into. That they know that the conditions of the world, as they see them are a result of decisions made by individuals enforced by institutions. And so the wrongdoings that we see in the world can be corrected by individuals and reinforced by institutions. And as people who are stepping into power, stepping into wealth, they have a greater and greater opportunity to play a role in correcting some of these inequities.

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

And so we're learning to code and we're reading Algorithms of Oppression by Safiya Noble and we're reading [inaudible 00:17:49] or Fire Next Door by James Baldwin. And we're talking about Criminal Justice Reform with [inaudible 00:17:54], because it's not just enough to make money, but you now

have the opportunity to really influence things. And if you have one, the awareness of some of these large societal problems, two, you have this skillset that allows you to actually affect change and put solutions out into the world. And then three, you have the financial freedom, the kind of economic mobility for you to be able to exert real time and effort to these problems. And you have the formula to become a leader, a change maker, even more than just an engineer or somebody who makes a ton of money in tech.

Ramona Schindelheim, WorkingNation editor-in chief:

So what does an employer get when they hire a graduate from Marcy Lab School?

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

One of our employer partners that we recently brought on this year is a very competitive tech company here based in New York a public, [inaudible 00:18:42] traded, engineering organization, graduates who start their entry-level engineering position tend to make around \$130,000 as a base salary with \$50,000 signing bonus and a really healthy package for stock options. And with that type of salary, you can imagine that they are working beside folks who graduated from Ivy League institutions. And of course our students, everybody's prepared, everybody's motivated to not come from as privileged of higher education backgrounds as the peers that currently work in [inaudible 00:19:14], and yet they're contributing just as much, they're getting promoted, they're being recognized for their efforts. And I think that's a result of a couple of things.

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

One, it's a different style of preparation. They're coming from a computer science background that is applied, that is project-based, that's grounded in fundamentals, but is reflected in the technologies and tools that are currently in use in the industry today. So from day one, our fellows come on the job, they are productive. They don't need as long of a ramp up period as their peers in college, because they spent their time in the Marcy Lab School steeped in these technologies. Two, even more important than the technical skill set they're coming to the table with, there's a different level of motivation that our students are bringing to their companies. Oftentimes they're interning beside their peers who went to top 25 schools. And someone in that position may say, "Well, this is a great opportunity, but if this doesn't work out, can't wait to go back to campus and see what other opportunities come my way."

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

Our students recognize just how big of a responsibility it is to take advantage of the opportunities that they've been able to earn based on their hard work and their connection with the Marcy Lab School, an opportunity to get paid close to \$200,000 is not an opportunity that they take lightly. And they bring that level of effort and intensity to their job. They're the first person there. They're the last person to leave. They're always looking for opportunities to learn more because they recognize that it's not normal coming from the background where they're coming from. It might be if you attended a school that cost \$70,000 a year, but otherwise this is an opportunity that many people don't get. And they're well aware of that.

Reuben Ogbonna, Marcy Lab School co-founder & executive director:

And the third thing I'd say is, again, because of the backgrounds they're coming from, the opportunities they have at the Marcy Lab School to engage in reflective dialogue around their identity, their race, their communities, they come into companies and look for opportunities to make the place better. They're

the first people to join their employer resource groups. They're the first person to come back and look for opportunities to volunteer or to expand the scope and diversity of a company's recruiting pipeline from leaders in that way. And we've been proud to see the way that our students have been recognized with pay raises and promotions. It's not just about them getting the job, it's them being able to step into leadership there.

Ramona Schindelheim, WorkingNation editor-in chief:

You've been listening to a special edition of Work in Progress, expanding opportunities in tech, creating a more diverse and inclusive workforce. This series is produced in partnership with Cognizant Foundation. For WorkingNation, I'm Ramona Schindelheim.