

## An Apprentice's Story: Episode 3

### START

**Rhoda Metcalfe**

When Danery Manzanares was growing up in Charlotte, North Carolina, he was a curious kid, an explorer. You know, he liked to try all kinds of different stuff. He loved sports, especially soccer. But he also liked the arts. He loved to draw pictures. And theater... He really liked theater.

**Danery Manzanares**

But I definitely liked the technical performing arts side more - so lighting and sound. So I just had a lot of different interests. And I think for me, that was kind of just trying to figure out which ones I can make a career out of. So, I was in JROTC which, I mean, that could have taken to me to the military if I really wanted to.

**Rhoda Metcalfe**

But you had a lot of doors open.

**Danery Manzanares**

Oh, I had like 20 doors. I had so many doors.

**Rhoda Metcalfe**

And Danery knew that he needed all those doorways, because he was an ambitious kid. He dreamed of having a great career one day. But he knew it wasn't going to be easy, because his family couldn't help them.

**Danery Manzanares**

So my parents came from rural Central America. So they were, my grandparents were all farmers.

**Rhoda Metcalfe**

Which country?

**Danery Manzanares**

Honduras. So again, my parents grew up on farms, and I think the highest they ever made it to is about the sixth grade in education, and then you go and you work. So I definitely would have been the first in my family to go to college,

**Rhoda Metcalfe**

Would they have been able to help you financially? Or would you have had to do it on your own?

# TRANSCRIPT

## **Danery Manzanares**

I probably would have had to do it on my own. To be honest, it would have been very difficult for them to help me and so I wouldn't have... Yeah, I would have had to do it on my own for sure.

## **Rhoda Metcalfe**

I'm Rhoda Metcalfe. And this is An Apprentice's Story -- a podcast about young people in America who choose to travel down a different pathway to find their career and their happiness in life. In this episode, we look at how some kids who really need a good opportunity can find it through an apprenticeship. For Danery, that new doorway opened one day at high school.

## **Rhoda Metcalfe**

He didn't know it then, but this was the door that was going to lead Danery towards his future career. What happened was his math teacher took him aside that day and asked if he wanted to join this new robotics team.

## **Danery Manzanares**

It wasn't just me, there was a group of us. We all excelled in our math courses. And he said, We want you guys to see who's interested to try and join this robotics team that a company - like a big company - it was actually Bosch and Bosch is a huge company wanted to fund this robotics program with the students from our high school.

## **Matthew Brown**

So I met January, the very first year of the team. My name is Matthew Brown. I'm a senior development engineer for Bosch Rexroth Corporation. We're the sponsoring company behind the first robotics program at Olympic High School. I was the design team lead. And so, my job is teach the kids how to design a robot basically, because that's what I do for a living. And when I design a robot for a customer, it's a three month process, basically. And I've got high school kids who are going to do it from a clean sheet of paper and put it on the floor in six weeks. It's just.. It was insane. So, you know, I'm throwing bits and pieces as fast as I can at these kids hoping they're gonna pick it up. And Danery stepped up says, okay, you know, I'll do the math, I'll own the engineering process of it.

## **Rhoda Metcalfe**

And once Danery got into it - you know, designing the robots and seeing them actually work out there on the competition floor - it was a revelation.

## **Danery Manzanares**

It's artsy, it's creative, you have to be creative, but you also have to be technically sound and you have to think about math, incorporate art into it. And I think when I started doing that mechanical design, I was like, Well, wait, hold on. Let's pause on everything else I thought of and see what this is about.

## TRANSCRIPT

### **Rhoda Metcalfe**

You're thinking that's cool.

### **Danery Manzanares**

Yeah, I was like, Man, I really like this, like, what's going on? I didn't know about this.

### **Rhoda Metcalfe**

And that's exactly the reaction that Matthew's company Bosch Rexroth was hoping to inspire in the kids because his company had an ulterior motive for creating the robotics team. You see, Bosch Rexroth is a German American company that produces automated robotic equipment. And several years back, they'd started an apprenticeship program hoping to attract more young people into the company. But it just wasn't happening.

### **Matthew Brown**

They needed qualified apprentices for the machining operations that we do. We've got CNC equipment that needs to be programmed. And we've got machines that have to be put together by hand. But we can't get people to come in that can read a blueprint, have a work ethic, and understand how to use hand tools to pull things together. And the team was put in place to directly support that.

### **Rhoda Metcalfe**

So when Matthew's company decided to start up the robotics team, they didn't go to just any school. They specifically chose Danery's school, Olympic High School, because, well, Olympic is well known in Charlotte for having a different philosophy from a lot of other schools. They're very big on career planning. They encourage academics, yes, but they also tell their students that going to college is no surefire route to success.

### **Mike Realon**

Half of the people who have a four-year degree in America they're unemployed or underemployed, right? Because they don't have the right education and skills to do the jobs of the 21st century.

### **Rhoda Metcalfe**

So this is Mike Realon, the head of career counseling at Olympic. And he thinks a lot of American kids go down the wrong path. They take college courses that rack up huge debts, but don't lead them to a good job. So Mike encourages his students not just to study, but to get real life, real work experiences, so they can figure out what kind of job they really want, and how to get it.

### **Mike Realon**

You have to get curious and chase it, right? Explore, talk to people, for yourself, you've got to come to this conclusion, what you're curious, what you're interested in, what you like. And then you need to try stuff... To help you find out is this something that would make me happy?

## TRANSCRIPT

### **Rhoda Metcalfe**

So not surprisingly, Mike is a big fan of apprenticeships, especially because the kids at Olympic High School, most of them have grown up poor,

### **Mike Realon**

Over half of our population is below the poverty level. So, I mean, if you get selected as an apprentice, you earned a ticket into the middle class in high school, and somebody is going to pay for your education forever, right? So it just shows them a different pathway towards prosperity and happiness in America.

### **Rhoda Metcalfe**

And Olympic, to be honest, is pretty lucky. It's surrounded by a lot of companies that offer apprenticeships, because Charlotte's a regional hub for advanced manufacturing companies. And many of them, like Bosch Rexroth, are German or Swiss-based companies. So, they have this European tradition of offering apprenticeships - to bring young blood into the company. And what they offer is really generous. These companies pay their apprentices both while they're training at the company and studying. And by the end of the four-year program, the apprentice has a very useful associate's degree, like engineering technology, for free, and they get a very lucrative job offer. And yet, the idea of doing an apprenticeship didn't attract a lot of students at Olympic until the robotics team came along. And kids like Danery discovered that building robots is actually cool.

### **Danery Manzanares**

The robotics thing just kicked the door wide open and kind of let it prosper into what it is now. It definitely showcased a lot of what I could see myself doing in the future in the, you know, manufacturing engineering kind of world.

### **Rhoda Metcalfe**

So Danery did apply for an apprenticeship and he got in. He actually started it part-time while he was still in senior year of high school. His company is Chiron America, a German American company that builds custom designed CNC machines.

### **Danery Manzanares**

In essence, it's a giant machine controlled by a computer that a customer will buy, and they will be mass producing their own products. We work with Boeing for our aerospace industry, making parts for their airplanes. In the automotive we work with just about every automotive company you can imagine. One of our most popular products is helping them to produce the rims for cars. So, our product is actually the machinery that is used to produce all of this.

### **Rhoda Metcalfe**

So Danery started out like all the apprentices learning to use the basic tools - files and drill and lathes - and he became very skilled with his hands. But after that, he started discovering his other talents,

# TRANSCRIPT

## **Danery Manzanares**

The mechanical design of things, so I am really good on the computer with 3D modeling software. So like I can take something in real life like a little Chapstick and I can make this on the computer and I can model it and make it really good. Something I'm, for whatever reason, really weirdly good at.

## **Rhoda Metcalfe**

And Danery's boss and mentor Robert Shook could see that his young apprentice was really good with people.

## **Robert Shook**

So I started developing Danery to be a spokesperson for apprenticeship. Because he wasn't afraid to stand up in front of a group of people and talk about what he was doing. So by the time he got to be a fourth year apprentice, Danery was my shadow. He would go to the meetings with the partners, and 'What kind of ideas do you have? And from your perspective, what could we do differently?' And Danery actually helped me push through some change.

## **Danery Manzanares**

And I graduated, and they offered me an opportunity to become the new instructor. So training the new apprentices on all of their fundamental skills from the ground up the first two years. I do all of their training, I'm their direct mentor. So I get to teach, which I have found is probably my passion, just being able to help people achieve their full potential, you know.

## **Rhoda Metcalfe**

And now at age 24, Danery spends a lot of time at local schools, including his old high school Olympic, opening the door for more kids to discover apprenticeships.

## **Mike Realon**

So you know, he's become a leader at the school, and then that really great resource to talk to kids.

## **Rhoda Metcalfe**

So do you think that he's been influential in encouraging some other kids to try the same path?

## **Mike Realon**

Oh, yeah, absolutely. I remember a mom coming to me who was part of the parent kid orientation. She said, I was dead against this, until I heard him speak. But that kid sold me that I can feel totally confident about my child who wants to pursue this path. I am not going to get in his or her way.

## **Rhoda Metcalfe**

And a lot of the kids who've gone this apprenticeship route have experienced a dramatic change in their lives. Some of them have been able to help their whole family.

# TRANSCRIPT

## **Jenny Dam**

Just the financial benefits of everything is - it's beyond amazing.

## **Rhoda Metcalfe**

Jenny Dam was on Olympics robotics team a couple of years after Danery. And now she's partway through her own apprenticeship with Groniger, USA. Jenny grew up in a family where money was always tight. Her parents, like Danery's, were immigrants. They came to the US from Vietnam just before she was born.

## **Jenny Dam**

My dad has been unemployed since 2013. And my mom is a nail technician. But yeah, with my dad being unemployed, it was a struggle. And I think at that point, he was just at home taking care of my grandparents.

## **Rhoda Metcalfe**

So have you helped your family out a bit with their money?

## **Jenny Dam**

Yep, for sure. Especially because the apprenticeship has given me so much, I have to always just make sure everybody's okay at my house, because before like it was just relying on my mom. So...

## **Mike Realon**

We've had stories of kids who are apprentices, and at different times, different kids, they were the major breadwinner in their families. You know, that opportunity has really helped them and their families through some tough times.

## **Rhoda Metcalfe**

And for some young apprentices, their company actually becomes like a second family that they can turn to when they need help. One kid Danery knew in his senior year at high school was really pulled back from the brink of disaster by his apprenticeship.

## **Danery Manzanares**

He was having a hard time. He wasn't living with his parents anymore. And for a while, like he was homeless, and he was sleeping in his car for a little bit. And then eventually, he just got it together. And with the help of his company, he managed to get his own place. He had his own like bed to sleep in. Like thank God he found that, he found that for him.

## **Rhoda Metcalfe**

And this is one of the reasons why Matthew Brown has devoted such a crazy amount of his time volunteering with the robotics team. He's seen how it leads kids into apprenticeships, that really change their future.

# TRANSCRIPT

## **Matthew Brown**

Yeah, there's just tons of stories I could tell you, of these students who didn't seem to have much of a future in front of them, that have had these aha moments, that have gone on to change their lives, the lives of their family. They work all around us in the business park. All the industry surrounding Olympic High School have greatly benefited from this program, and I'm just super happy to be part of it, you know?

## **Rhoda Metcalfe**

As for Danery, well, he's in a great place now. 24, with a job he loves and lots of money saved. He's planning to buy a house soon - maybe a fixer upper since he's so good with power tools. And recently he did something really special for his parents. He wanted to thank them for working so hard to give him and his sisters a life in the US.

## **Danery Manzanares**

Two years ago, I actually took them to Honduras - back to Honduras - for their 30th anniversary, I paid for it all with them. And they were able to renew their vows and just do all kinds of...

## **Rhoda Metcalfe**

You're going to make me cry.

## **Danery Manzanares**

(Laughing).. It was really nice and for me like to have the opportunity to be able to do that for my parents and go back to see the life that I could have lived, the life that I could have had. It's just like earth shattering humbleness, humility, just knocking me out kind of thing. So yeah, I think for them, it's like they see what kind of opportunities my company provides me and see what kind of opportunities I'm given and they're just very happy that I've been able to kind of find something that has been able to do that for me.

## **Rhoda Metcalfe**

And now in Charlotte, North Carolina, this model of apprenticeship that German and Swiss companies have brought to the region has begun to spread. A growing number of American companies, including health care and IT companies, even Bank of America and Wells Fargo are offering a type of American apprenticeship that offers a kid straight out of high school, the chance to get free training and education that leads to a well paid career. And companies are doing it because it makes sense. Sure, it takes time and money, but what they get out of it are young, enthusiastic employees with all the right skills, at a time when it's hard to find skilled workers. And for the kids, especially the kids from low income families, it's a surefire way into the middle class, and a life and career that makes them happy.

**END**

## TRANSCRIPT

### **Rhoda Metcalfe**

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### **Rhoda Metcalfe**

I'm Rhoda Metcalfe. Thanks for listening