



FOCUS GROUPS

Minneapolis

Dunwoody College of Technology

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Why Dunwoody?

- I googled careers in robotics and Dunwoody was the first thing that came up.
- I actually used to do battle bots, so I came here every month to compete when I was in high school.
- I like working with my hands and this is a place that allowed me to do that.
- My grandpa told me about it. His brother went here back in the '50s. He kept talking about it and eventually I just got excited about it—and he offered to pay for most of it.
- I've always been mechanically inclined. I was looking for a way out of dead-end grocery industry jobs. Dunwoody seemed like a good route.

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- I kind of stumbled onto Dunwoody. I was looking for a career change. I'm on about my 11th career. Used to be a white-collar guy, real estate broker. I've always liked working with my hands, I've done a little bit of welding in the past, and I wanted to find something that would be for my brain, as well as my hands, a good combination. I looked into machining and found out that Dunwoody was where I wanted to be. Machine tools technology was the program that suited me best.
- When I got out of the army I had no idea what I wanted to study, so I studied gunsmithing on the GI Bill, and that's where I got my first taste of machining. I decided I wanted to study that further, primarily for job security. My theory was that, if I studied machining I could find a job in any big city in the U.S., and so I Googled machine tool technology and Dunwoody came up, and they were advertising 100 percent placement. I talked to some of the instructors here, found out about the demand for manufacturers in the Twin Cities. I was living in New Mexico at the time, so I picked up roots, moved here, and got my first job a month into the program. That didn't fit my schedule, so I quit that one and got my next job three months later and a scholarship from that employer. I'm going to be working for them until I retire, as soon as I graduate.
- I had previously started an engineering program at one of the major state universities, and I ended up getting out of that. I was looking to come back to school after working in shipping for a long time. I did not want to deal with the byzantine structure of most of the universities. I took a tour of Dunwoody, and I loved it.
- The placement rates, everything.
- I graduated high school and went right to Mankato. I just kind of spun my wheels, got my generals done but didn't really know what I wanted to do. So, I moved up to the Cities and said I'd take some time to figure it out. I heard a radio ad for Dunwoody, so I checked it out. It was everything I probably should have done right out of high school.
- I accidentally stumbled on this place. I received a scholarship, determined my liking for welding and three years later, I'm still here. Working on another degree, so it must mean it's a good place.
- I had a buddy that was going here, and he was telling me all about the cool stuff that they do and their project based things and I thought, that sounds pretty interesting to me. So, I checked it out, looked at some of the different courses and found one that I liked and went from there.

Dunwoody isn't cheap. Was price a factor in your decision?

- I'm sponsored, which means basically I've never had to pay the bill myself, so I'm out of this conversation.
- I think it goes back to your job rate too, like the job placement rate. When you look at 20 something plus a year, for a school, but you know you're probably going to learn everything you need to know and walk into a job and they're in here fighting for you, like halfway through your program, it makes that number seem a lot smaller. And just knowing about your repayment options and everything, it's going to be a lot easier to do when you're placed into a job or should be able to get that kind of job.
- With the job I just got offered, I'll be able to pay off my student loans within three years. So, it's paying for itself now.

We keep hearing about the worker shortage in manufacturing, and especially the skills gap. Did that motivate you to come to Dunwoody?

- That is a huge relative factor because pretty much every department in this school, or I guess the manufacturing side of it, will have an influx of open jobs in the next five, ten years. Most companies may already be feeling it because of the Baby Boomers.
- The more specific thing was our program, we heard a lot about worker shortage but then how many of those open jobs could be cleared by automation? My brother is in lasers, industrial lasers, so he was kind of the impetus to push for this, and what he said specifically was automation. Machine vision. Anything to do with what could possibly replace quality control tech. There's a person looking at it. If you can get a machine to do that, you don't have to pay health care for a machine.
- Robotics and vision. Robotics and machine vision. Machine vision is like a camera but not just a camera though, it's the software analyzing it, like every part. Are you looking for a color, a shape, missing pieces or just analyzing how it came out? There are a lot of different things you can do with vision.
- The way COMPANY got me was they do scholarships. They gave me a \$2,000 scholarship out of the blue. They were also here for Focus Friday and then, as it also happened, they were looking for machinists. They already made an investment in me, and I got to meet them upfront, talk to

them and after talking to them I threw my hat into the ring.

- Duncan, how many interviews have you been on in the last two weeks?
- Two weeks, I've had seven. I've had 12 in the past month.

It's a sellers' market for you in a very real way. Advise the manufacturers who might be reading this: What's the best way to connect with a student who has manufacturing skills?

- Apprenticeships or an apprenticeship style job. When I first got here, one of the first things I started doing was look for full time jobs, and I struggled a little bit because many of the places wanted one or two years of experience. Wanting you to be able to run this and that and the other compared to having a job where they're willing to pay you a small amount but give you experience and mold you into the employee they want and give you that experience that you can take with you.

Are these union-affiliated apprenticeships or more like really high-quality internships?

- I suppose the term intern or apprenticeship depends on what employer you're working for and the legal details of each, but essentially taking someone you know is not yet qualified and making them qualified through experience is what I'd define an internship as or an apprenticeship.

By and large what do your parents think of a two-year tech education?

- If I would have listened to my parents or my teachers or advisors in high school, I would have made a different decision. I was never once told about Dunwoody.

Is it because they didn't know?

- I'm assuming it's because they didn't know. My parents never talked to me about it, but after I was here for a year, then my mum goes, well your grandpa went to Dunwoody.
- I think it is a matter of public image where what's preached is you have to pursue a long and lengthy and arduous education to get a job. But it's not true. If you have a solid work ethic, in the Twin Cities, you can find a job or in manufacturing in general, you can find a job. It's just not preached.

- When I got out of high school a bazillion years ago, I never knew that trade schools were a thing. We were led to believe that was a route for dummies. I went to a four-year college. Now that I've been at Dunwoody, I see the value of tech schools and getting a two-year degree. Some of the degrees are four years but you can power through two years and get a fantastic career. Manufacturing, it's blowing up and you mentioned earlier that a lot of these Baby Boomers are retiring soon and these companies are going to be feeling a big hit unless they start hiring hardcore. They can't hire fast enough.

- I'd say 70 percent of the employees at my machine shop are over 60.

You can see why the executives are nervous about all of this. What's your advice to people who are deciding where to go to school?

- Talk more about it in high school. Technical college was always lightly touched on but you hear a lot about universities.

- I say talk more about it because I didn't know anything about welding until I actually, we got here and stumbled across the program.

- I was going to say, put your hands into work. Go work with your hands and see if you like it or not. That's the first thing you should do. From a young age. Start changing your parents' tires in seventh grade. Do whatever. Help out with your hands and you'll realize, maybe I don't need to be in a bucket all day.

Did any of your parents push back at your decision to come here?

- My mom was very hesitant on me getting a two-year associate's degree because she thought you couldn't get a job unless you had a four-year degree. So, she did push back a good amount, but she let me go anyways.

What's the hardest thing about Dunwoody?

- Attendance. Most of the teachers here treat you like you're an employee. You show up on time, you show up and do your work, otherwise you're not getting paid for it.

- It's difficult in a good way, I think, because a lot of people aren't really used to that. Making sure you are here on time or you're going to get busted for it.

- There's no one breathing down your neck and it goes into how you learn.
- I walked in and the first day they're just like, wire it up, and I'm like, you want me to do what? I had no idea but it's that intuitive nature. They give you the materials and say, go figure out how to do this. We'll teach you some of the basics but a lot of this is kind of intuitive so you have to learn how to do it because when you get put in front of a problem at work, there's not someone there holding your hand all the time. You've got to be able to put the first effort towards it and then start with the questions if you don't get it.

A college president told us a few years ago, that 40 percent of new students need remedial work in math and reading. Whose fault is that?

- I've got a 30-year gap between the last time I attended any kind of school, and I panicked about the math classes but I managed to pull off a B+ and then a B- in machine math, that's trig, algebra and geometry, and I was a D student my whole life in mathematics.
- I think that if you realize the coursework ties into your career field, you take it more seriously. Algebra and trigonometry are used pretty frequently in machining and if not, it's at least fallen back to as a reference if you can't get an automated answer from your thread generator that's on your computer.
- And, like you said, I am terrified of calculus because I just don't have the motivation because it's too abstract for me. I don't know how it applies to my job, and I thank my lucky stars I don't have to study it but I'm very glad that I understand trigonometry because I use it frequently and it applies to what I do. I see it's practicality and therefore I'm willing to invest my time and effort into it.
- I would say if I'd seen something like a machine math book, if I'd seen something more like that in high school, where it was just a bunch of numbers on a piece of paper, but it was tied into something real, something that I could see myself doing in the future, that would have made it a lot easier to get through those classes.
- I never really had a problem with math but that would have made me motivated to learn it.

How many people went to a high school that had a manufacturing lab or something that would make it relevant?

- I had a small engine class, does that count?
- We had a metal shop and a wood shop and that was about the most.
- In high school we had a tech class. I don't remember doing it, but I actually used a CNC lathe, a CNC mill in that class. Did soldering.
- My junior high school had a technical class. It was one trimester of one year and it was random little modular areas where you'd do building for one month. Like radio. That was the most. But then after that it just got pulled out of the whole course and then was probably dust since then.
- Going back to what you said earlier to the perception of it, the people who were focused on shop, they were kind of the burnouts a little bit. They weren't going to go far. They weren't going to go for a four-year college, they were like, who cares?
- They were just kind of that crew. That general perception of it. So, anything related to actually working with your hands was, well wasn't worth it.
- That was outright rejected in my school, and in my high school it was either four-year college or military. Anything new was just unheard of and it was a pain getting any new programs in there, as well.

What is your message to high school educators?

- More STEM electives.
- Allow people to work with their hands.
- One size doesn't fit all. The four-year degree plan may fit someone else or perhaps something such as philosophy or theory is good for someone else but at least enlighten them about the other options.

Do people get Dunwoody? Do they understand what a high level it is?

- Not at first. I guess there's an older perception that Dunwoody used to kind of be a burnout school.

- I would say it's the complete opposite. I've had more conversations than not where people ask me where I'm going to school and I say Dunwoody and they're immediately like, "Oh my gosh, can I offer you a job? 'Cause I want you right now."
- I was talking about older people, that perception from back in the day and I mean it's, I don't think they knew anything that went on in here. It was just that building that was right next to 394 and it was just on the curve, just on the freeway over there. So, people didn't know what was happening.
- I agree more or less that people are like, oh my uncle went there or an older sibling or some relative of someone who has gone to this school and they hadn't heard anything about the burnout situation but more or less that it's a very old, well-known school is all I've gotten from them.

Manufacturing executives like to talk about soft skills in the focus groups. Things like getting to work on time, or getting to work at all. What's your sense of those issues?

- I do make it to my 7:30 class on time but my girlfriend sleeps through her alarm constantly and that's just who she is as a person, she just constantly sleeps. I mean if you can't get out of bed on time then how are you going to do anything right at your job? I always thought that being on time was really important 'cause when I worked at fast food it was really annoying when I had to stay five, ten, 30 minutes after when people didn't show up for their job on time.

Do those people exist here?

- You can see it. You'll see kids in your class day one and they're not there semester two or semester three and it's because a lot of times those kids were not showing up to class, they weren't staying long enough or they didn't show up on time, or not doing the work.
- This class started with 15, we're down to 11.
- We lost five at least.
- In the robotics program we have it so that if you miss nine days you're automatically withdrawn from the program, no question.
- It's enforced. Yeah, we lost two people this semester. We're in our

fourth semester, at the very end, halfway through, about to graduate, and they just stopped showing up and they got kicked out.

- I don't know if it's ever too early to start teaching soft skills. I think that starts from parenthood. Or parents teaching their kids to be on time. But it also has to be enforced throughout high school, college, and by employers. If an employer is willing to put up with someone showing up late, I guess that's how they run their business, but it got knocked out of me real quick when I was young, that's when I learned to be on time. That's where I was conditioned. You don't show up, there are going to be consequences.

Manufacturers say they have to contend with other things like iPhones, or that people don't stay around very long.

- As you stated before, it's a sellers' market. I think employees can get away with a little bit more here than in other areas. In other parts of the world, if someone says, I've been here two months, I want a raise, the employer gets to say, tough, you get to work at what we're paying you.
- I was going to say, I haven't experienced that here at school but I have in the workforce before I came to Dunwoody. I worked in an unskilled labor sort of job and just looking around and seeing that sort of behavior, people not showing up, people on their cell phones, texting, I realized that I could get stuck doing dumb, dumb work forever if I didn't get an education. These people are not committed to their jobs, they're not ... I dunno, I didn't like it. It's a participation trophy generation. These were all younger, under-30 people.

What would you change about Dunwoody?

- Fewer electives. Let's see, I understand I have to take them for an associate's degree in occupational studies but I still struggle to understand how world religion makes me a better machinist. And I studied the first semester. I'd rather be making parts.
- Then, at the opposite end of the spectrum, I never thought I'd need to know environmental sciences but a lot of it applies to what I do at work. How we recycle. How employers have historically screwed up in handling waste, how companies have profited by finding ways to eliminate waste and reuse their own products. We probably spent two or three days just studying the Ford manufacturing plant and how they restructured their business to essentially filtrate their own sewage with plants and mushrooms and they're able to ... the water is cleaner coming back in than when

they originally had it. And I never would have imagined I need to know environmental sciences, but it applies to what I do, and I didn't know it. So, I guess there's a balance when it comes to electives courses.

- Something like that actually ... when it's like a focused elective, like logic. We took a formal logic class at the same time and that was fantastic. We were learning a lot of sentence structure logic but the mathematics structure of it still applies.