

NINA MOINI: Most classrooms have desks, whiteboards and textbooks. But one new St. Paul Public Schools classroom has excavators, loaders and piles of dirt. The district's new Sandbox classroom opened in May, giving seniors hands-on experience operating heavy equipment through a partnership with the International Union of Operating Engineers Local 49.

School leaders say it's the first program of its kind in the Twin Cities, creating a direct pathway from high school into construction and operating engineer careers. Joining me now is Dusty Thune, a teacher at the Sandbox classroom. Thanks very much for your time this afternoon, Dusty.

DUSTY THUNE: Thanks for having me.

NINA MOINI: Well, it sounds like a really fun class. It sounds like people really get that hands-on experience. What does it look like? What goes on in there?

DUSTY THUNE: Oh, it is a wild time. We have a lot of classroom time where we learn all about the machines, the different kinds of machines that they might interact with on a construction site. We learn about safety in and around the machines.

We also learn about the job as a whole, like what you need to worry about when you get laid off in the winter, how to budget yourself correctly using financial literacy frameworks. We do a lot of SMART goal setting.

And then when we get outside to the actual Sandbox, we have two track steers and one mini excavator. And the students are just chomping at the bit to get into that seat.

NINA MOINI: I bet.

DUSTY THUNE: They want to get on there and get as much seat time as possible and dig up all the sand. It is really, really fun. I see a lot of smiles all day. It's also a very humbling experience. I don't know if you've ever been in an excavator before.

NINA MOINI: I have not.

DUSTY THUNE: Yeah, not being a video game person as a kid, getting in there, I was really confused by all the buttons and handles. But the students seem to understand these controls, like it was a Nintendo or something.

NINA MOINI: Yeah, right. Tell me a little bit more just about what exactly you are talking about when we're talking about heavy equipment. You mentioned excavators. What kind of falls under that umbrella?

DUSTY THUNE: Sure. So we have a mini excavator. So it's a smaller one. It's a little smaller than a car. But it has a nice, big bucket on it with a claw-- or a thumb, we call it-- to be able to grapple things, picking up rocks or trees or power poles, things like that.

And then we have these track skid steers with a bucket or forks. And they can lift pallets full of barrels. Or what we've been working on lately is grading sand to a level surface and following a construction site plan to understand elevations and compaction and slope.

So looking at any parking lot-- if anyone's listening at home, looking out the window at a parking lot-- they have to figure out the right slope for drainage and figuring out the elevation above sea level and making sure everything is not all full of giant holes and it's nice and smooth. We all love smooth highways and smooth parking lots. And our suspensions thank us. So it's a really important thing to learn.

NINA MOINI: Yeah, it's the way all of our lives get to operate-- is because of jobs like this and planning like this that goes on all around us. I wonder if students ever have a realization, like, whoa, there's a lot more to this than I thought when they're in the class. What are some of their reactions?

DUSTY THUNE: The first day is always a lot of reactions. They're looking at the different machinery, like, wait a minute. I've seen some of this from the window of my car on 94. You mean we actually get to touch that?

NINA MOINI: Yeah.

DUSTY THUNE: And not only do you get to touch it, you get to drive it. And that's pretty cool. When we go up to the Training Center at the 49ers in Hinckley, we get to try out a lot of that equipment. And they get to try new things that they didn't have access to at the Sandbox here in St. Paul.

And so it really is an amazing experience. Their eyes are wide. Our urban students just don't have a whole lot of equitable learning opportunities, unlike outstate students that may have had experience with a skid loader or something on a farm. Or maybe they've dug a ditch with an excavator at age 9.

Being from up north, as well, I saw that stuff as a kid and was able to look at a lot of it. I never got to play with it, unfortunately. But now that they're seeing it and being able to touch it, it's opening up whole new avenues of careers that they never thought was possible or attainable for them.

NINA MOINI: Absolutely.

DUSTY THUNE: We're really excited about it.

NINA MOINI: Yeah, tell me more about that partnership you mentioned with the 49ers. We mentioned it in the introduction there. But I'm sure they're thinking, too, we got to get the next generation here set up and then tap into groups of people that we didn't tap into before maybe.

DUSTY THUNE: Absolutely, especially with our BIPOC students. They have so many more skill sets, like multiple languages they can speak. If we're in a urban community and there's neighborhoods where people are concerned about noise or whatever else, they can talk to them, instead of having to go through an interpreter-- and also just understanding the culture of different areas. And architecture is really important.

Our students have such a great background in understanding the urban setting. It's really cool to see them dive into what actually makes it happen. How does it actually work?

NINA MOINI: Exactly. And so how does it fit in with you to the district's larger maybe goals around technical education and then different kinds of trades and other careers? Is this a part of maybe a resurgence? Or how do you feel about it?

DUSTY THUNE: I think we've been pounding away at this for a while with the St. Paul Pathways programs through medical science, technology, agriculture. And some of this could have been covered in agriculture, like farm work. But we just don't have that access to those equipment, basically.

We have teachers for it and people that understand it, but we don't have the space. And so building the Sandbox was the next step in really solidifying this program for years to come and opening up that pathway to heavy equipment operation and highway heavy with these amazing community partners that we have. We have Hayden Murphy donating the machines and the 49ers taking us on training adventures.

And it's just been absolutely amazing to see this whole new world. I started out as a firefighter and then got into teaching after I was a training officer and spent about 20 years doing special ed. And so I got really good at differentiating learning, instruction to different learners.

And so getting into working with this has been really fun, because I have these students that maybe they didn't have consistent help or consistent support-- and trying to understand what they wanted to do someday, other than just seeing what their friends were up to. And now they're thinking outside the box. They're taking pride in their work.

And they're really excited to tell their friends about it and post on social media. These hands-on experiences we've been having have just been absolutely game changing. It's been just awesome.

NINA MOINI: And this is the inaugural class. And I'm wondering if they're thinking about their career aspirations or if you're getting any kind of feedback about how they're feeling about it?

DUSTY THUNE: Oh, they're so excited. There's has been a little bit of a setback with some of the students, because they weren't 18 yet and they didn't have their driver's license by the time they were interviewing with private sector hiring people. And they needed that for that. But it was a great experience. And they got those nice, soft skills down for interviews.

And now they're doubling down and getting all their hours in behind the wheel and getting their licenses and getting everything in tune so that, when they actually do turn 18, they can just hit the ground running. I was just talking to one of my students, Alicia, yesterday at the Sandbox. And she came back, even after graduating-- didn't have to be there-- but put in an extra three hours in the seat just so she could get that much more practice working that excavator. So when she turns 18 this summer, she will be ready.

NINA MOINI: Yeah. And I know it's cool that you're operating this machinery. But from what you're saying and the stories that I'm hearing, I can see that so much more is going on in the classroom, in terms of just motivating students and individualizing your approach. So that's really cool to hear about. And then just tell us again-- you mentioned financial literacy, goal setting, a more holistic approach to the class.

DUSTY THUNE: Yeah, really taking a look at it from the outside in without having the students make the same mistakes as others have made before. So if you get a big lump of cash and then you are laid off over the winter, how do you structure your life? What are your expenses? Do you run out and buy a big, fancy, new pickup truck now that you have to make payments on and run out of money around Christmas time?

And then, also, wherever you're working, if you're out on the highway, you might have some pretty distant job sites. And what do you do for entertainment? Are you blowing your money at a bar? Or are you being fiscally responsible?

NINA MOINI: I love that you're diving into that. Because I do think a lot of people think that, the high school years, there should be an even greater focus on just goal setting and financial literacy-- really exciting to hear about all of this. Congratulations on it and wishing you continued success, Dusty. Thank you.

DUSTY THUNE: Well, thank you so much.

NINA MOINI: That was Dusty Thune, Operating Engineers career pathways teacher with St. Paul Public Schools.