

Student Voices, Part Two: The Middle School Maker

One-to-One Podcast, Learning Technology Center

Season 3, Episode 8

Linda DeYounge (00:05):

It's 10:30 on a Tuesday night. Most eighth graders are asleep, or at least pretending to be, bedroom doors closed while they play video games with their friends on voice chat. But in one house in Central Illinois, five 3D printers are running. They've been running all day, and they'll keep running till morning. Let's walk into that room, not a warehouse, but what appears to be a spare bedroom that has been converted into a small factory. Spools of colored filament line up like thread on a seamstress's shelf, a low counter where the printers rest, walls covered in brightly colored creations. And a teenager who on any given night has more orders to fill than hours left to fill them. From the Learning Technology Center, this is part two of our special student voices edition of the One-to-One Podcast. I'm Linda.

(01:17):

Last month, we spent time in an elementary classroom watching third and fourth graders learning the ins and outs of 3D printing, discovering ways to pull an idea off a screen and hold it in their hands. But there's a question that lingers after that. What happens next? What happens when that same kid gets a little older and starts to realize that the things he makes are things other people actually want to pay for? Today, we follow the thread a few cities over, to a small business in the making, to a junior high hallway that doubles as a broadcast studio, and to a kid who is, by almost any measure, already doing the thing that most of us spend years trying to figure out. Turning what he loves into something that matters. I'm

Blake (02:17):

Going to wait for the burner in the back. All right, we're good.

Linda DeYounge (02:26):

Meet Blake. In many ways, he's your typical teenager. He has a cool haircut and braces. He hangs out with his friends and participates in his school's robotics team. He's a little nervous in front of a camera. Again, pretty typical, and also not. Because Blake is part of a growing group of students who consider themselves young tech entrepreneurs. I first heard about him and his business through the LTC's 2025 buttercow competition, which sounds made up, so let me explain. At the Illinois State Fair, there's a longstanding tradition, a life-sized cow sculpture made entirely out of butter. Yep. Real butter. Last year, we opened a challenge to students across Illinois. Design a 3D model inspired by the Buttercow. The winning student would attend the fair and print them on site as a commemorative gift. Blake won. And shortly after that, a message popped up in our team chat.

(03:41):

All caps. He has a website, an eighth grader with a website. When I was in eighth grade, I was watching anime reruns and ramping my bike in the nearby woods. There are very few middle schoolers who have already achieved financial success or are turning their hobbies into a full impressive production. He is, as far as I can tell, not particularly interested in slowing down.

(04:14):

To understand Blake, you have to understand that his whole story starts somewhere almost laughably small, not with a grand vision, not with a business plan, with a broken shoe.

Blake (04:29):

So really it started at a museum where there were a whole bunch of 3D printers and I saw them and we got to look at some stuff there. And I was like, "Oh my gosh, so cool." And my friend got a 3D printer and he was making stuff and giving it to me and I thought it was awesome. So I was begging my parents for a printer, but they were reluctant because they thought it was super expensive to get into. But eventually they got one for Christmas, just this super basic one that is low level, but it can get things done.

Linda DeYounge (05:21):

For a while, that's all it was. A hobby, a curiosity. Blake making things because Blake liked making things. Then one day, the strap mechanism on his Croc broke. For the uninitiated, Crocs have two modes, cruise mode and sport mode. And the small plastic piece that holds the strap in place is, as it turns out, not easy to find as a replacement.

Blake (05:53):

You couldn't buy that piece anywhere, so I decided to reprint it because I couldn't buy it anywhere. And I tried to save money and all that, and it worked. And I asked my parents, I was like, "Can I set up an Etsy shop to sell these? I feel like they'll sell well." They said yes, and it was slow, but things sold and it kind of just took off from there.

Linda DeYounge (06:22):

He opened an Etsy shop. He called it Blake's Thingamajigs and he started with the Croc piece. Then came custom jibbits, the charms that clip into the holes on Crocs, personalized with team logos, names, jersey numbers, and then fidget toys, then models. Each new thing, quietly expanding what the business could be. There are three bestsellers that anchor the shop.

Blake (06:55):

So our number one seller on Etsy would be a custom card holder. So it's a little rectangle type thing that has your name on it and it's in a fun font, all of that. You can get in any color. They'll sell multiple a day and they're really popular.

Linda DeYounge (07:19):

Blake has a theory about why.

Blake (07:22):

I think it stands out because no one else makes it. It's personalized, it's colorful, and it overall looks good. And for people that struggle to hold cards, it works amazing for. There's many groups or card clubs around the nation really that have ... One person has bought it and everyone was like, "Oh my gosh, that's so cool." And then they all buy one. So it's funny because you look at shipping things and things like that and there's 20 orders that's going to the same town in Florida or something. It's really fun to see how it grows like that.

Linda DeYounge (08:11):

I can picture it now. Dorothy rolls up to her weekly bridge game with the girls. She's got her iconic grandma visor on and a Tupperware packed with her latest batch of cookies. They've been playing for years, but today she pulls something different out of her purse, a custom card holder, gasp, admiration around the table, a chorus of where can I get one? And all of a sudden, an order is placed for 20 cardholders shipping to the same zip code and Blake's family gets to work.

Blake (08:53):

Our second one is a high chain, so it's a big chain that goes around your neck. We sell sports, sports teams, any just personal logos, things like that. They're big, bulky, and they look really cool.

Linda DeYounge (09:09):

Remember Flava Flav's public enemy era? When he wore his iconic chain with the giant clock on the end of it? That's exactly what Blake's hype chains look like. Big, bold, colorful chains worn around your neck, printed with your team's logo or your own. The kind of thing you wear to a game and immediately become the most committed person in the stands. And just like Christie's elementary students, Blake has to carefully consider the design. Here's the thing about printing a chain. The links have to move. They have to be connected, but not fixed. Doing that in plastic without any bending, without any assembly takes a specific kind of problem solving. Blake showed me what it looks like mid print. This

Blake (10:05):

Is what the chain looks like before it gets all of the support removed. You have to print it like this so it keeps structure, so it can print cleanly, and then you remove it all and it is smooth. So the chain is printed, it's an 18-link chain. Each piece is rotated 90 degrees so that it can print as clean as possible. When you print it, it prints with supports that hold up the floating pieces so that you can then later remove them and have no problems with printing and don't get the spaghetti.

Linda DeYounge (10:44):

A small engineering problem with a satisfying solution. Blake has filled the orders of a hundred at a time, whole wrestling teams, all wearing the same chain into the stance, and the hype chains aren't where the team orders stop.

Blake (11:01):

The last one is a bag tag or ornament type thing. It's very colorful and personalized to what you would like. We sell that as teams, so we have multiple team orders so that the whole team matches.

Linda DeYounge (11:21):

Those are the products. The bestsellers of Blake's Thingamajigs, which has grown from a hobby to a full-time operation that his entire family supports. His dad builds the website. His mom helps organize, and they all package and ship orders around the clock. But the flashy products are only part of the story. Because somewhere alongside the business, Blake started doing something else with his printers. Grief has a way of finding people who know how to do something with their hands. Blake started using his printers for charity work early on, not as a business decision, but as a human one. When someone in his community experiences a loss, a death, a tragedy, he makes something, sells it, and gives the money away.

Blake (12:26):

This is a Newt statue. It's a statue of a cat that had died in Edwardsville. He was special because he came out to the trail and greeted everyone that had passed on that, and he was super popular all over Facebook and things like that. And he eventually passed away. They put a sign right next to where he always showed up in honor of everybody that he had visited there.

Linda DeYounge (12:59):

And so this Newt statue, did you make it for the sign?

Blake (13:06):

So it's based off of the sign. It's a replica, and it's a miniature one. The one Edwardsville is 10 feet tall, I think. The people who bought it were local people from Edwardsville who loved Newt and he was really part of their daily lives, like going on the trail to see new and just for him. And it really hurt people when they didn't get that joy in their life anymore. So in honor of him, we made it so that it could be within everybody's homes. We donated 50% of profits sold to the Humane Society in Edwardsville because they were strongly connected to new also.

Linda DeYounge (13:54):

We had a cat like this in my hometown too. He was a stray named Colby, who was taken in by a local musician with a good sense of humor. Colby had Facebook groups and devotees, and when all nine of his lives were over, there were cards and goodbye messages and online memorials. His passing brought us together as grief often does. Funny enough, Colby's adopted father was also a tinkerer. He made metal plaques and trophies, so Colby got a plaque just like Newt got a statue. Blake also shared a story about a 16-year-old from his town named Colin, a hockey player. He had been coming home from a game in St. Louis when he was hit by a stray bullet, an unspeakable tragedy.

Blake (14:48):

It was a strong feeling for the family and for all of his friends. There were many people who were greatly affected by his passing. We decided to make key chains with his hockey number on it. It said 72 strong in honor of him. We sold a lot of them and donated 100% of the proceeds back to his family. Yeah, it makes me really happy to sell so much of something for that charity work to give that much money back to the family or charity. I feel like it connects me to the community more. It really is an honor to be part of that and just have the connections to be able to do big things like that that mean a lot to people.

Linda DeYounge (15:40):

What Blake does in these moments is older than 3D printing, older than technology entirely. It is the same thing humans have always done in the face of loss. Reaching out as makers and creators to support others during difficult times. They chisel tombstones, laser etch plaques, and 3D print memorials. The tools change. The impulse doesn't. Our thoughts go out to Colin's family. You can find out more about 72 acts of kindness by visiting their Facebook group, linked in the show notes. For Blake, the impulse to make something, to be a part of his community, shows up every single week. It's time for Panthercast. Panthercast is Fulton Junior High Broadcast Club. Five eighth graders, one elective period. A 10-minute video every Friday for the whole school. No broadcast room. The hallways are the studio. The lockers are the backdrop, and the school itself is the set. The students take center stage, but the guiding force behind them is Ms. Katie Dollahon, their tech teacher and club mentor.

(17:14):

I'll let her describe it.

Katie Dollahon (17:16):

So the framework of our Panther cast is we don't have a broadcasting room. They come and get ... Our broadcast room is the school. So your background is going to be your lockers. It's going to be the hallways. It's going to be where we are. And we used to have a green room, but because of space, we lost that. And I actually really love that because I just feel like what's happening is here within these walls of our school.

Blake (17:44):

It's a lot of fun to roam the school really and just get to pull kids to do fun things with and interview them based on fun things, play a game or something. Most kids are like, "Oh my gosh, look, it's Panther casts." And they want to do interviews or outros or things like that.

Linda DeYounge (18:07):

Every Friday morning, a new episode goes out. And just like any morning news broadcast, it has rotating familiar segments. Birthdays, because as Katie puts it, every kid wants to hear their name, sports updates, spirit day reminders, a segment called Words of Wisdom with a wisened custodian named Mr. Joey delivering quotes to the camera. A segment called Panther Pulse, a roving mic shoved in front of whoever happens to be walking by. And my favorite, a segment called Learn and Lead, where students model school procedures correctly and incorrectly with a little bit of acting flair.

Blake (18:55):

We have something called learn then lead. So we are doing things incorrectly and then showing how to do them correctly. We had one to not lean back in your chair so someone was laying back in their chair and they fall back and they get hurt and that's incorrect. So then we all show the correct version on how to do that as an example to show people what not to do and what to do. We did a segment in the library where we had someone running to grab a book and then fighting for the couches in the back rather than the chairs. It's supposed to be funny, but also have a lot of information. We had a kid jump over the table in the library to get to the couch while someone ran around the tables. It's funny to jump over a table, but it's also telling you what not to do because it's not practical to jump over the table to get to those chairs.

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Linda DeYounge (19:57):

So you had your own stunt double and everything for this?

Blake (20:00):

Yeah.

Linda DeYounge (20:01):

Who did you get to jump over the table?

Blake (20:05):

He's in our club. He's one of the actors. He's funny, outgoing, athletic, so it's what he does.

Linda DeYounge (20:15):

Blake is the crew's primary camera operator. He films. He scouts. He sometimes edits. He is almost by design the person you don't see.

Katie Dollahon (20:28):

We are so thankful to have Blake on our team because not only has Blake have the knowledge, but he and his family are very invested in this program. He has really taken our Panther cast to the next level with his expertise and his equipment. Blake is one that is very humble, very kind, and wants to do everything behind the scenes. He is not your out in front of the camera, a look at me kind of person.

Linda DeYounge (21:01):

There's something almost countercultural about that in 2026. The whole architecture of social media is designed to reward the opposite. The look at me, the personal brand, the curated highlight reel. And here is a kid who genuinely prefers to be the one holding the camera. That's still mostly true, but in the midst of filming and supporting from the sidelines, something started to change. He started to show his face.

Blake (21:35):

At the start of the year, I did not like it that much. I've grown out of that and I enjoy it now. I'm still not in front of the camera all the time, but I've grown a lot and pretty much enjoy it now. I realized that no one really cared what I looked like or if my hair was messy or something like that, that only I wouldn't have a care for. And that just being yourself, no one cares and what we're doing is awesome either way. I

Linda DeYounge (22:10):

Think about what it takes at 12 or 13 or 14 to arrive at that conclusion. Even now as an adult, there's a flicker of doubt, a voice that says, "Don't mess this up." I remember public speaking days in school, that feeling in your chest, that hope that maybe the teacher would run out of time before your turn. And eighth grade, that's a complicated year. You're still figuring out who you are, still getting used to being in your own skin. High school is just around the corner, and yet in the middle of all that, there are moments where a student just decides to lean in, to be a little silly, to be seen, to not overthink it. Ask Blake or Katie to describe the cruise dynamic, and they both reach for the same idea, that this particular group of

five fits together in a way that feels almost accidental, like the right people found each other at the right time.

Katie Dollahon (23:23):

They are doers, they are dreamers, and they will dream up a great project, but they also will see it through. They don't just talk about, "Oh, we could do this, we could do this. " They will make a plan and they will execute. They work well beyond the time that we have in our elective and our lunch. They spend time at home editing, they spend time outside of school filming, and they really work well together. And I couldn't imagine a better group that just ... They're like a puzzle because every person is needed in this crew and not one person overlaps another. So we have our director, we have our editor, we have our sound, we have our scouting, we have our filmmaking, we have our camera man.

Blake (24:20):

I think we work together well because we are all open for ideas. We're acceptive of other people's ideas, even though it means getting rid of your own and just open overall to work together as a group rather than one person doing everything.

Linda DeYounge (24:43):

No one person could manage an entire production alone. I said that to Blake, and he nodded like it was obvious, but it isn't. Not really. Releasing your own idea when someone else's is better is something most people find surprisingly hard to do at any age. That willingness to let someone else's idea replace your own. That brings us to October and a ghost. Between the weekly broadcasts, someone had an idea, a ghost story, just a little segment, just for Halloween.

Katie Dollahon (25:31):

We have one that is obsessed with Halloween. He wanted to do a ghost theme, just kind of like a little episode, just to kind of scare people that there's a ghost here at Fulton. And it's funny because our teachers have experienced some paranormal activity here at school and they've talked about it with the students. So as Halloween was getting closer, they're like, "We should go interview Mrs. Smith about that ghost she talks about in her classroom or Ms. McDaniel and that ghost she saw." So they started interviewing and as they were going through the halls, other teachers were like, "Oh, you haven't heard my story." So many teachers were feeding these students these ghost stories.

Linda DeYounge (26:15):

And then the wheels started turning if the school had ghosts, what about the elementary school, the high school? So they reached out to old teachers and principals to get permission to take their paranormal show on the road to visit the halls of their schools of childhood past alone at night.

Blake (26:39):

So we went to schools after hours at nine o'clock at night, filmed that finding ghosts and just fun experiences like that. We were up almost every night doing that, trying to find them, seeing what lurks the halls after hours.

Linda DeYounge (27:00):

Did you or any of your crewmates on this movie feel like you found any ghosts?

Blake (27:07):

It was a little scary going to some of the schools. It kind of almost felt like there were ghosts there because of just creepy things that happened there, weird things just somewhere else where we were doing it, where we had just been and a book falls off the shelf. All the lights are off and the only noise you can hear is the air conditioning running or things like that. So there's just a faint hum over the silence and it's really scary to just be in there with only a few of a few people.

Linda DeYounge (27:47):

Definitely haunted, but ghosts weren't the only things going bump in the night.

Katie Dollahon (27:54):

The halls are empty, but the custodian stuff is there. And so as we were family, I would go around and be like, "Hey, just so you know what we're doing, just play along." And they're like, "Oh no, I've seen some stuff." And I was like, "I'm on. " And they're like, "No, seriously." So it was the coolest thing because we love our custodian staff and our custodian here, Joe, was here at night. And when I tell you, we couldn't even get through a segment without him messing with us because he had so much fun hyping these kids up that there was a ghost. So we'd be in the band room trying to set up this ghost story because it was an actual ghost story that was reported to us. So we're trying to be in there and like, okay, they said that the gong went off.

(28:43):

So we're setting it up and he is in the background making noise, making a cat noise, making a, "Ooh." That was such a cool moment because they were able to make that relationship with Joe where he usually comes right at the end of school and he's here through the night. So it also brought Joe closer to the student community where before maybe didn't have those connections. So now anytime we see him, he has to make a comment about our ghosts that's creeping the halls.

Linda DeYounge (29:18):

By the time they had enough footage, it was obvious. This wasn't going to fit in a regular Panthercast segment. It was a movie, an hour long movie, and it needed a premiere.

Katie Dollahon (29:32):

And the more we were filming and getting all this done, I was like, "We might have to rent out a theater. We're not going to be able to show this on Friday. It is too long." And so their wheels started turning. They're like, "What if we did a movie premiere and charged people to come to it and then that would be like a fundraiser?"

Linda DeYounge (29:54):

In the end, they settled on a full scale event in the school's gymnasium. They put Out chairs, about a hundred of them. They made limited edition cases for a DVD style release, laser engraved with show numbers. They sold tickets at lunch and they waited. How many people did you have about show up?

Katie Dollahon (30:16):

I would say between 500 people. We kept having to get more and more and more seats out. We ran out of seats. We have about 300 folding chairs, so then we had to start putting people in the bleachers and the kids were coming up to me and they're like, "We're out of the video cases." And I was like, "Oh my gosh. We sold out of our limited edition

Linda DeYounge (30:42):

Cases." Teachers who were featured in the film showed up in formal gowns, signing autographs. A former principal flew in from New York.

Blake (30:52):

We had an old principal who lived in New York fly down too, and he was there and he watched it there. He liked the year before Panther Cast and had heard even better things about ours. It went well past what we thought it was going to be. We did not expect it at all and just expected a hundred people to show up. But then as it started feeling, we were kind of getting stressed out and everything because we had it planned for that. We hadn't brought enough food or anything to sell, but it was so awesome to see how many people were there to support what we were doing. I felt special just being able to have the authority to go into schools and film really late at night and just find ghosts. It definitely brought us closer. It's kind of when we realized what we could really accomplish as a team.

(31:58):

If we worked together to get things done, we could get it done fast and well.

Linda DeYounge (32:06):

Afterward, Katie asked the crew what they wanted to do with the money they'd raised. New equipment, a trip.

Katie Dollahon (32:15):

And they're like, "We don't need anything." And I was like, "Well, we have money to spend, so is there anything that we would make our broadcast better?" And they're like, "Honestly, we just want this to be for the longevity of the program. We want the kids to come after us to have the ability to buy stuff. So that money is there and they haven't bought anything with it. And I just love that they were thinking about the future of this program and not just themselves. And that is literally the character of every person on this crew is like they think of others before themselves.

Linda DeYounge (32:51):

They haven't spent a dollar of it, not because they don't have needs, but because they already have what they came for. A place where their particular combination of skills mattered, where the puzzle only worked because every piece showed up. They'll be in high school next year. Panthercast will belong to someone else, new voices, new ideas, new cameras roaming new hallways. And yet, without being asked, they thought about those kids, kids they don't know yet. Kids who might find themselves the way they found themselves in a broadcast club that almost didn't exist. That instinct to leave the door open for whoever comes next turns out to be central to how Blake thinks about everything, including technology itself. Because underneath Panthercast, underneath the charity work, underneath the five

printers running through the night, there's a question. The same one Katie asks her students every year in one form or another.

(34:04):

What is technology actually for? And what does it mean for the generation that's growing up inside it?

Blake (34:13):

Not everything technology-wise is bad for them. That's how the world is advancing. It can help them out a lot. The usage of AI is advancing and how not everything AI-wise is bad. You can use it to complete any task really. You can use it to teach you how to do a homework problem or solve an error on your computer. It can do anything and it's just growing from here.

Katie Dollahon (34:52):

For students to be, one, literate of the technology is important, but also the jobs that are available right now, there are so many jobs unfilled in the tech world.

Linda DeYounge (35:05):

But Katie is quick to say it's not only about jobs. It's about something harder to quantify. The moment a student discovers what they're actually good at, what makes them feel capable, what makes them want to show up.

Katie Dollahon (35:23):

And so I have told my students, even with the knowledge that they have gained this year in my programming classes or my cybersecurity classes, that they are going to have a leg up on the competition because they have this background of JavaScript, of Java, of CSS, of HTML. They are going to be able to say, "I know that language. I can program in that language. "If you look at house listings today, you're going to see a drone footage of the home and then you're going to go inside and there's going to be a 360 walkthrough. And there is someone working for that company that is their tech person. They are in charge of flying the drone, getting the footage, producing a video. And who would have thought that in the real estate business you would have a career because you know how to fly a drone or you know how to edit videos.

Linda DeYounge (36:26):

Blake doesn't need a hypothetical. He's already living one. And when I asked him where he sees himself going, he didn't hesitate.

Blake (36:37):

I see myself in engineering side, either physical or software engineering. I enjoy technical things and I can see myself pursuing that as a career.

Linda DeYounge (36:56):

And when I pushed him further, if you could build anything, no limits, what would it be? He didn't reach for something abstract. He reached for something useful.

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Logan (37:09):

I would make like a robot head, not like a body for the robot, but like a robot head because I want a robot walking around my house when I'm trying to sleep.

Linda DeYounge (37:19):

Wait, that's Logan.

Yuri (37:22):

Or like something like the others said, like something to help me with something, but you would have to get to know how to code it and make it like move around and stuff.

Linda DeYounge (37:36):

And Yuri?

Harlow (37:38):

I'd probably put a robot that does my laundry and my chores because like every time, "Can you do your laundry? Can you do your chores?" "No, I don't want to do my laundry. I don't want to do my chores.

Linda DeYounge (37:50):

"And Harlow. Okay. Here's Blake.

Blake (37:55):

I can see the use of a generative AI being incorporated into physical things like a robot or things like that being around the house and doing tasks for you, like having a robot washing the dishes or making food or things like that. I feel like that used to be a fantasy that was never going to happen, but it's got the chance to be completed really soon.

Linda DeYounge (38:29):

What is something that you would immediately delegate to your robot?

Blake (38:36):

Probably like cleaning up my room and things like that, because I don't like doing that.

Linda DeYounge (38:43):

Runs a business, raises money for charity. Films movies. Thinks about generative AI embedded in household robotics. Also, does not want to clean his room. That is the full picture. That is the whole true portrait of a kid. But Blake is not naive about any of this. The same mind that designs hype chains and imagines household robots also sits with something quieter, something less comfortable.

Blake (39:19):

Really like how much it's going to be able to do and whether it's going to take over what we do completely and leave us with anything to do.

Linda DeYounge (39:32):

Are there things that you think that are always going to be human that humans will always have to do that technology just can't?

Blake (39:42):

Not really. And that's where a bit of the anxiety comes from.

Linda DeYounge (39:47):

I think about that answer a lot because it wasn't the answer of someone who's afraid of technology. It was the answer of someone who understands it, who has held the filament in his hands, watched it grow layer by layer into something real, and knows exactly what machines are capable of. The awe and the anxiety are coming from the same place, the same source. Katie holds the same tension, but after years of watching students find themselves through technology, through a camera, a printer, a line of code, she has landed somewhere that feels, if not certain, at least hopeful.

Katie Dollahon (40:39):

I don't think it's going to hurt children, but I also think that they need to have a balance of it. It is detrimental to our eyesight. It is detrimental to our brains and our lifestyle if we are behind a screen all day. So knowing what that balance looks like, but also embracing technology, I think is important. Technology is the way of the future, and if you shy away from it, it's just going to put you at a disadvantage.

Linda DeYounge (41:10):

Embracing and balancing. Two things that are genuinely hard to do at the same time, and yet somehow the kids I've spent this time with seem to be figuring it out. There's a version of this conversation that goes nowhere. Kids are on their phones too much. Screens are rotting their attention spans. Technology is making them isolated, anxious, passive, and some of that is true or can be true under the wrong conditions, but it misses something. It misses the third grader who stayed in from recess to redesign a castle because the roof wouldn't connect. It misses the fourth grader, glowing because a can opened the way he planned. It misses the eighth grader who spent his own money, his own time, his own creative energy, making key chains for a grieving family, using a machine to accomplish it at a large scale.

(42:22):

Technology at its best is not something that happens to children. It is something they happen with, a medium for the ideas they were already carrying around, a way to close the distance between what they can imagine and what they can hold in their hands. When we only see the danger in it, we miss the kids who are already living inside the possibility. That is not a screen time problem. That is a human being coming into focus. When I first visited Christie McGraw's elementary classroom, all that noise, all those humming machines, all those third graders designing tiny ants into their houses, I saw play at work. I saw kids using technology to harness their own imaginations. Then I watched a fourth grader talk about his braille toothbrush holder designed for someone with a visual impairment and realized he was helping someone. I watched them all hold their creations in their hands and ask, "Did I really make that?"

(43:45):

And then I talked to Blake, who at a young age has already answered that question for himself so many times over that he's moved on to the next one. "What else can I make? What does it mean that I can?"

(44:03):

The printers in his bedroom will run again tonight, five of them, humming in the dark, building inventory, building something for a card club in Florida or a wrestling team in Illinois, or for a family still learning to grieve. Thread by thread, layer by layer, making another thingmajig. Someday in the near future, these kids' thingmajigs will be everywhere in new phone apps, in film scripts, and game designs, in medical devices, in weird and wonderful things we can't imagine. But thankfully, they will. They'll keep imagining and imagining. The tools will be different, bigger, stranger, more powerful. For now though, the 3D printers run, and that's enough.

(45:07):

This has been a special two-part edition of the One-to-One Podcast produced by the Learning Technology Center. Your writer and narrator was Linda DeYounge. Heartfelt thanks to Blake and his family whose generosity of spirit and time made this episode possible, and to Ms. Katie Dollahon for building the kind of classroom and crew that makes students want to show up and make something. Thanks also to you, our listeners, for making the journey with us across both parts. If you enjoyed this miniseries, give us a like and a follow and leave an encouraging comment for our students. They're absolutely listening. See you next month for our regularly scheduled programming.