

Details

How Internet Connectivity Impacts Digital Equity - Bonus Episode with Lightspeed Systems

In this bonus episode, I chat with Brook Bock, Chief Product and Marketing Officer at Lightspeed Systems, all about how to ensure equitable internet connectivity for every student. You'll also hear practical methods to gather information on connectivity challenges faced by students at home and how to take action to address digital equity issues in your school or district.

Show notes: <https://classtechtips.com/2023/06/18/digital-equity-bonus-episode/>

*Digital Equity

Introduction

Hello there and welcome to today's episode of the Easy EdTech Podcast! If we haven't met before, my name is Monica Burns. I'm a former NYC public school teacher and I've been out of the classroom for a few years leading professional development for teachers, and writing about all things EdTech on my blog [ClassTechTips.com](https://classtechtips.com)

You might be used to joining me on Tuesdays for new episodes of the podcast, and today is a special bonus episode in partnership with Lightspeed Systems. I'm excited to bring you another special bonus episode on a Sunday.

Before we jump into today's episode, a quick reminder — you can head to my website classtechtips.com/podcast for all of the show notes and resources from today's episode, and if you're listening to this episode on a podcast player like Apple Podcasts, Spotify, or Google Podcasts, you should see a link in the description that you can click on as you listen today and it will take you to all of the resources I mention.

Promotion/Reminder

This episode is sponsored by Lightspeed Systems. Lightspeed Systems is dedicated to providing K–12 districts time-saving solutions to create safe, secure and equitable education, so they can focus where it matters most—students and learning.

Today's Intro

Today's episode is titled “How Internet Connectivity Impacts Digital Equity - Bonus Episode with Lightspeed Systems” and I talk with Brook Bock, Chief Product and Marketing Officer at Lightspeed Systems. If you're curious about how to gather information about connectivity issues in your school or district – specifically what connectivity challenges students have at home – then this episode is for you. Brook shares not only the “why”

digital equity is important but also “how” to gather information that can help you take action.

Episode Transcript

Monica Burns:

Welcome to the podcast. I am so excited to chat with you today about a very important topic, how internet connectivity connects to this big topic of digital equity. But before we dive in, would love to hear a little bit about your role in education. What does your day-to-day look like?

Brook Bock:

That sounds great. I'm Brook Bock. I'm Chief Product Officer here at Lightspeed Systems. I've been in EdTech for ages in different capacities at College Board and then Blackboard and Vanco Payments. So I'm very excited though to be part of this angle here where we're truly trying to ensure students have a safe and equitable learning environment. You know, if you think of the hierarchy of needs of a student where, you know, most foundationally wanna create a digital safe room, really for them to be able to interact with their educational activities in a very safe way. And then kind of gives you move up the pyramid, you know, to be able to be safe at school for both teachers and staff physically safe and then emotionally, you know, in a position to be able to digest learning. And then finally to be able to use technology in an optimal way to learn.

Brook Bock:

So as a whole, that's what we're striving for. My job in particular though, is to really go out and understand the problems, the problems that students and teachers and staff face in that core job of educating students and finding out what is challenging, what is hard, so that we can build products to help solve, solve that. And so we talk to a lot of administrators, a lot of leaders, a lot of educators to figure out how we can do that best. So it's a very, it's a great job.

And it's, you know, hopefully we're making a big difference in a lot of, a lot of people's lives. Well,

Monica Burns:

So many layers of things right. That you are, are able to, to speak to in our conversation today. And I wanted to focus in on one particular piece. And today, you know, we're talking about digital equity, and although we might think of it as one thing, I know that it touches so many of the ways that we interact with digital tools, and it's a term that listeners may have heard before, may not have heard before, or may have heard in a variety of contexts and are still trying to wrap their head around. So can you explain to us what digital equity means and how it goes beyond just devices?

Brook Bock:

Sure. I mean, it most foundationally right? It's ensuring that students, all students, regardless of income or race or, you know, any other factor, are able to have access to education, right? And, and same access to, to education that all students have. And, and there's a huge digital component to that, right? Increasingly, especially post covid technology is used so substantially in education mm-hmm. <Affirmative> both inside and outside of school, that you know, that can be a barrier to all students having access to the same learning opportunities that other students have. If they do not have a, you know, kind of access to technology is now become a foundational stepping stone to being able to access you know, the academic opportunity that, that all students should have.

Monica Burns:

Yeah. And we know this is a conversation that came up throughout the remote learning of the past few years and has been a conversation when talking about giving kids devices to take home or even working within the, you know, the physical spaces of a classroom that may have connectivity issues or just things that are not always super reliable for educators who are designing learning experiences for students. So, you know, we know that this happens in a variety of spaces, but what are some common challenges or, or barriers student face in accessing reliable internet when they're outside of school?

Brook Bock:

Sure. I mean, it can run the gamut of you could have a student who is, doesn't have a safe environment at home and they're at a Starbucks, right? And they or some other location that is not a home environment. It may be a student living in a multi-family home who has many people trying to connect to the same carrier. And now in, within the United States, we have a huge variety of, you know, urban, rural, suburban environments. And, you know, there are migrant camps, there are lots of different places mm-hmm. <Affirmative> that students may call home. They might be at two homes, and that might vary. You know, from day to day where that student is and what they have access to. And there are a lot of factors that can cook, can put pressure on bandwidth and their ability then to access really their homework. Previously, students would bring home a notebook and write and use a pencil <laugh> and do their homework there, but that is, you know, increasingly less likely that that is the form that their homework will take. And they're, you know, and there's so many very powerful educational apps, but they are all dependent on mm-hmm. <Affirmative>, you know, this basic fundamental access to the internet.

Monica Burns:

I mean, it's such a great point that you made that in the past. You know, we would hope that students had a, a quiet space or a dedicated space or a spot where they might not feel interrupted by all the other things that are happening in their lives. Or, you know, perhaps they were moving from one environment to another, you know, during after school hours. And all of those are still present challenges and for some students, but you add this additional layer of internet connectivity, whether something's reliable, whether they're moving or on the go, or there's just a bunch of people trying to connect to one network that's not feeling very strong. So for schools that have, and districts that have identified this, they understand that this is a need with their student population and their wider community. Are there, is there something they can do? You know, are there any specific strategies or initiatives that schools or districts can implement to assess, you know, students off campus? Internet connectivity?

Brook Bock:

Yeah, I mean, the hard, there are things that they can do once identified, right? You can have partnerships with ISPs. You can provide hotspots to certain students. Even just making the schools and teachers aware of the situation of a student is, is valuable too. So there's so many things that you can do. The hard part though is identifying that that, right, you know, many districts now rely on these kind of once a year surveys that go out to families. And that's, that

is such a, you know, once a year, <laugh>, you know, your situ my situation varies way more, more than once a year. So student situations can vary significantly. Imagine, you know, they're having challenges six months prior to that. So do they not have access for the six months until the survey goes out? What if English is not the first language or even Spanish? You know, is the person responding to that able to answer the survey? You know, and a lot of districts don't have high response rates for those surveys. So it's, it truly is not the best way to collect this information. It's not a timely way of collecting the information. So there's a lot of things that districts can do once they have it, but getting it is, you know, the, the hard, the first step of that.

Monica Burns:

And so that piece of, you know, gathering that information, you're so right that just the intention is always there right? At the school district level. Like people know that they wanna check in on, on this and gather that, that information. So that once a year survey, we know that for most families right. Or many families. Right. That might change over the course of the year, you know. Can you, can you share with us any success stories or best practices from schools or districts that have effectively addressed, you know, digital equity, they have assessed students, internet connectivity and, and gotten an information that is actionable for them?

Brook Bock:

Yeah, no, there is, and there's really two kind of multiple components of that. But yeah, there have been, I, we've met with districts who have like substantial migrant camps within their districts, and they're able to then provide, you know certain ISP partnerships, they can get aqua, you know, solicit funding to be able to support hotspots. So there are some really great you know, situations in which students who, you know, most likely did not have access. You know, and again, this wasn't always clearly documented, clearly known, and you might identify a student, right? A single student reports that they don't. But really knowing the breadth of that problem can tend to be, you know, a hard mm-hmm. <Affirmative> a really hard thing to capture. But there is, you know, it is very solvable and you know, with a very clear impact on, we, you know, it is very clear that the time, you know, time spent on academic activities will in, you know, certainly increase and improve learning outcomes.

Brook Bock:

And you know, us being able to take that step just to one, know when an individual student has problems, but then the, the, you know, the extent to which that is impacting other students and, and in even an IT administrator who has to res, you know, respond to a single student mm-hmm. <Affirmative> that it could be a bandwidth or it could be device health, it could be memory, it could be a lot of things. So giving that IT administrator more tools to be able to identify what exactly is the problem. And then if the problem does turn out to be bandwidth, what is the breadth of that problem?

Monica Burns:

And so, I know as you were sharing there, I was just thinking about the one-on-one conversations I've had with students and families, right? And there's some students and families who are very comfortable, right? Sharing where they might need extra support or they know that they can come to a certain person in a school or, or district community and, and ask for that, right? But then there's other families that may not even know, right, that they have that agency or that they can go and, and share. And then of course, there's folks like in an IT department, like you mentioned, that might get a, a few different data sets, but not really be sure on, on how to take action. So, you know, as we think about prioritizing this and, and really making sure that students have that digital equity, you know, can you, can you share with us, you know, what are some long-term benefits or outcomes that can be achieved when schools and districts make this a priority?

Brook Bock:

Yeah, I mean, if you just think about it of like even something, if I were to host a party, right? And I was able to send that electronic flyer to three friends but really I had 15 friends, right? But if only three of them had been able to be on the internet to get this, my party would be, I mean, you know, my reach would be smaller, my party would be smaller. And so it just is opening it up, right? Opening up that educational opportunity. And there are, you know, we you know, this kind of op, you know, opportunity to help solve this problem came to us. It was just a few months ago in talking to a district, and clearly we knew that digital equity is a major concern, but you know, identified our ability to solve it because it, you know, a major, major district in the United States said, you know, what would be really helpful is this, like, I wanna know how many students you know, don't have access.

Brook Bock:

Do they have poor access? Do they not have access at all? And then that got us thinking like, Hey, we actually could really solve this, you know, help solve this problem. But it's being able to, and that education is right, you are trying to advance the, like life outcome and learning outcome for a population of people. But if you're only able to deliver it to a percentage of that people, then you're missing that opportunity. And we know benchmarks are down in all 50 states. Mm-Hmm. <affirmative> and, you know, one of the most fundamental things that we can do to help improve that is is, you know, ensuring that all on 100% of the students within those districts are being given the opportunity to learn and access technology for them to learn

Monica Burns:

And having accurate diagnostic information, right? Really having that data so that you aren't guessing, right? Or saying, I think it's this, or maybe we should do this, but really being well informed, right? Is, is what is such a crucial component of this. You might have a feeling or one student might come to you, but if you're looking for that breadth, like you mentioned, having real data is going to be crucial. So, you know, that gets me into the next question I wanted to ask you, which is, you know, what does Lightspeed Systems do? Right? We've kind of circled around it, but I wanna really hear it from you. What does Lightspeed Systems do to ensure equitable connectivity for every student?

Brook Bock:

Sure. So because we, you know, there's federally mandated that there are, the districts have filters in place to ensure the protection of students private, you know, data and, and information that they can access internet safely within school. And in providing that software, we are also able, and they're very, you know, strict controls around this you know, at the school level mm-hmm. <Affirmative>, but we are able to do these speed tests basically. And again, it does not provide any personal identifying information at all. But to be able to where a student is attempting, we can see whether they've attempted to access the internet and or whether they've attempted and totally failed. Whether they had tried, it was just slow, whether they tried and, and failed, and we can do the, assess this no additional bandwidth hit on the part of the school, which is a important mm-hmm.

Brook Bock:

<Affirmative> consideration. And then we're able to report on that. So student, we can do it at the student level. Again, no geographic information or anything, but just, did this student have access to attempt to connect to the internet and have problems, or was not able to at all, did they twice you know, within a week did not have access or any number of times had trouble access and the district is able to set their threshold. So we know you know, the government said 25 megabits per second is kind of a standard, but we allow the district to set it higher or lower. Some districts feel like that is not fast enough, so they could set the threshold to be you know, even faster than that. And then we, we have a product called Digital Equity that it sits within digital insight and digital insight just for framing mm-hmm.

Brook Bock:

<Affirmative> provides really important app usage data to districts to help them understand how students are using their applications. It gives them privacy information about the apps that their students use how the, what their privacy policies are, et cetera. So this is a new dimension to that digital insight solution that we have that then gives you the view of these students had trouble connecting. And it also gives, we'll give a map view of and you can kind of hover over it and, you know, in the map of the geographic area, you can see 200 students we're unable to connect, or 200 students had poor connection or five. And that really gives that kind of breadth of problem. We can see how many IP addresses were attempting to connect. It gives you a little more context. Were they in a really credit place or not a credit place?

Brook Bock:

Mm-Hmm. <Affirmative> we give the storage capacity of the device, the memory of the device the operating system. We give the ISP. So all this information to when there is a challenge, you know, it enables a district to proactively identify mm-hmm. <Affirmative> where students are having challenge and solve it be, you know, as soon as possible. But then also, you know, help trouble if it is a smaller number of, if it's one student, not 200 students, what else could be going on that might cause that. But the real goal is to, as soon as possible, get that student learning

Monica Burns:

And that proactive component that you mentioned, I think is really crucial in this conversation. When we talk about setting up students for success, of course, at the beginning

of the school year, right? We often think of that as like the natural reset, but as we started our conversation talking about the changing nature of connectivity over the course of a school year for a student, the fact that you can gather such fantastic data and then have something to take action on, not just the, we know this is important, but we know this is important and this is what we're doing about it, I think is a really important next step or, or, or, or two steps that need to be side by side <laugh>. Right. about this component. Is there anything else around the, the data piece that you think would be of interest to listeners? We've got classroom teachers, we have folks that are doing that IT work, right? Reviewing that type of data, and then we have got people who are having conversations around this idea of digital equity.

Brook Bock:

Yeah, I mean the one I will say the two multiple groups that you just mentioned, like kind of the overarching theme of all of them is they're understaffed, right? There's like, not, there's fewer teachers, there's fewer time, there's IT administrators who are servicing a law, you know, a significant number of teachers and students. And so being able to surface this critical information they need kind of reduces that time burden, that hunt, that discovery. Then why is the student behind? I don't, you know, there's a blind spot that teachers have without this information, right? Mm-Hmm. <affirmative>, like it's kinda eliminating that blind spot for districts and then remediating the problem as soon as possible so students can, can have access to learning and, and you know, there's greater visibility into why that student might not be performing. You know, as, as as hoped.

Monica Burns:

I love that point too, cuz I think it comes back to, you know, what I was thinking earlier on, you know, the best intentions, right? Yeah. And even as a, you know, all these roles and I'm, you know, thinking with my classroom teacher head on, right? We have the best intentions, but sometimes there's just not enough time or resources or we don't know exactly who to ask or, or, or you know, or, or what conversation to have with which family member and even how to frame it. But the ability to gather this data at the school and district level to make decisions with this data in mind is just, I mean, it's fascinating. If nothing else then very actionable <laugh> for schools and districts. Yeah. You know, and so I'm so glad that we were able to carve out time to chat about this, but I wanna make sure, you know, people can connect with you Brook. Where can they learn more about Lightspeed Systems?

Brook Bock:

Yes. Just go to LightspeedSystems.com. We will have information on digital insight and digital equity both up there and there is a lot of available funding too. There's, you know, because digital equity is such a important concern, there is a digital equity act. So there are ways to help fund this so that it is not an additional burden on the district. But yes, and reach out to me anytime I'm on LinkedIn, Brook Bock. But also feel free to just head to our website and you can learn a lot more about digital equity in there.

Monica Burns:

Perfect. And I will make sure to link out so anyone who's listening right now can find out more and connect with the team. So thank you so much, Brook, for your time today and for having this really important conversation.

Brook Bock:

Thanks so much, Monica. I appreciate it.

So let's make this EdTech easy with some key points from the episode...

Make digital equity a priority.

Collect the right kind of data.

Take action based on the data you collect.

Remember, you can find the shownotes and the full list of resources from this episode on classtechtips.com/podcast including all of the ways to connect with the team at Lightspeed Systems.

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Again, a big thank you to our sponsor for this episode, Lightspeed Systems. To learn more about Lightspeed Systems, please visit www.lightspeedsystems.com.

Outro

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Episode Resources

- Check out Lightspeed Systems' [website](#)
- Follow Lightspeed Systems on [Twitter](#), [Instagram](#), [Facebook](#), & [LinkedIn](#)
- Connect with [Brook Bock on LinkedIn](#)
- Learn more about Lightspeed Systems' [Digital Equity](#) and the importance of assessing students' off-campus internet connectivity.