

FAQs For You - LIVE BMW Podcast

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[00:00:00] Sherenna: Hi everyone, and welcome back to the podcast. I'm really excited about today's episode because we're diving into a powerful example of what co-design and co-research can look like in action when trust, collaboration, and shared purpose are at the center. I've teamed up with two incredible organizations and a forward thinking school district to unpack how they've built and maintained a strong people-centered partnership. The BMW team is working together to improve Mind Education's Math, video game ST Math. StT Math is a pre-K through grades eight game-based program built on the science of how the brain learns, inviting students to explore, make sense of and build lasting confidence in math through visual problem solving. More than a practice tool, ST Math offers a fundamentally different learning experience. Removing barriers, sparking curiosity, and helping all students develop strong conceptual foundations before formal instruction. In today's conversation, you'll hear what makes this collaboration so unique, how they've stayed grounded in a people first mindset, and what's helped them navigate the real world challenges of working across roles and systems.

There's some thoughtful takeaways and inspiring moments ahead, so I won't give too much away. Whether you're just getting started in your co-design journey or looking to deepen your practice, this episode is packed with insight. So let's jump in.

Hello everyone and welcome to another episode of FAQs for you, where we explore successful co-design educational partnerships and implementation strategies. Today's topic is creating successful district developer collaborations. I'm your host, Sherenna, and I'm so excited because this is our very first live podcast. Joining today are some amazing people representing Birmingham City Schools, Mind Education, and WestEd. They affectionately call themselves BMW, more on that later. So before we dive into the introductions, I want to share a little bit about each organization. Birmingham City Schools is an urban district in the heart of Alabama, serving 19,000 diverse students across 43 schools with a mission to prepare every student for college and career success. BCS offers a wide range of academic programs, career pathways, and enrichment opportunities from P-K to high school and classrooms, and virtually. The district is committed to equity, innovation, and excellence as it empowers students to thrive in school and beyond.

Mind Education is a nonprofit rethinking how education research gets done by doing it with schools, not just on them, and in partnership with WestEd and Birmingham City schools, Mind is co-leading a bold experiment in co-research and co-design, building real world R&D infrastructure, surfacing what drives student motivation in math, and developing tools that make research more

usable, scalable, and equity driven, especially for the students who've been leased served.

Through innovation, capacity building and research, WestEd is helping schools and communities meet the most demanding and enduring challenges in education and human development. Through research practice partnerships, WestEd supports education agencies and solving persistent challenges through rigorous, relevant, and timely research. With over 60 years of experience leading research partnerships at all system levels, WestEd works closely with schools, districts, and state agencies to co-develop research agendas aligned with their goals.

Without further ado, I'd like to welcome today for the very first time on FAQs for You, Terri Crawford, Andrew Colson, and John Rice. Can we clap it up for them? Okay. I'm gonna ask that each of you introduce yourselves really quickly before we dive into this amazing podcast.

[00:03:54] **Terri:** Hi, you all. I am Terri Crawford, ST Math Program Specialist at Birmingham City Schools.

[00:04:03] **Andrew:** Hey everybody, this is Andrew Colson. I have a fancy title, chief Data Science Officer.

But what that means is that I've been looking at, usage and also outcomes for students and also teachers on our program for over 20 years.

[00:04:20] **John:** And, hello, I'm John Rice. I'm a Senior Research Director in research practice Partnerships at WestEd. Great to be here. Thank you.

[00:04:30] **Sherenna:** Wonderful. Thank you everyone.

Okay, so let's dive into the nitty gritty, right? We have some amazing stories to tell about the success of your partnership, but let's take it back to the very beginning.

I would love to hear how your partnership was formed. What drew BCS, Mind and WestEd to work together initially? Tell us the origin story.

[00:04:55] **Andrew:** Well, I'm going to start out because the furthest back origins go with myself and John from WestEd. We've actually been working together for pretty much a decade, wouldn't you say, John? So when it was time, eventually under Birmingham's guidance to pick a research partner, that was an easy pick for me, given the program is ST Math, and then I'll just, throw one more thing out there, which is that, Mind got started with Birmingham through another grant partnership actually with Verizon's, their VILS program. And so we were familiar with serving Birmingham students through a different philanthropic program, and that's how we got introduced to Birmingham.



[00:05:41] **Sherenna:** Hearing how your partnership started lays such a great foundation for our conversation today. It's always inspiring to hear how partnerships begin. I think what's just as powerful is how a partnership has continued to thrive over time. So let's shift a little bit to talk about the building blocks of your success.

When I think about the word partnership, the first thing that comes to my mind is communication. I think about sharing ideas, staying connected, and being transparent. And we've also seen how a breakdown in communication can seriously impact a partnership.

Can you share with us your approach to communication? What strategies have helped you succeed in this area? What has been your recipe for success?

[00:06:21] **Terri:** Well, our communication approach is built on three ingredients, transparency, consistency, and humanity. We all bring that together with our lab coordinator, Dee. We have a special glue that holds all communications and scheduling and breakdowns of the things that we need to do comes from a central location. Our transparency, we always seek to know, you know, what it is that we're thinking, what's going on, what our needs are, our availability, consistency. We have a biweekly cadence of meetings. We try not to miss those that they are, if they have to be missed for some reason, we reschedule them quickly, but we make sure that we consistently meet and we talk with each other. And humanity, we are not just like pieces of a puzzle, but we are people that, you know, with our own lives and experiences and ups and downs, and so we get to know each other as a team, and that helps with the communication, knowing who you're talking with, knowing their goals and the reason that they're working on this project.

And don't forget. Having a Dee, Delisha, who keeps your team together, that's the glue there.

[00:07:47] **Sherenna:** I love that. That's, that's so great to hear. And it really sounds like you're leading with a human centered approach, which is so powerful. It's easy to forget that at the end of the day, we're people first, so it's great to hear that you're being intentional in keeping that top of mind in how you're approaching the work. And I also really appreciated what you said about not just being pieces of a puzzle, but actually taking the time to get to know each other. That kind of connection truly makes a difference.

When we're talking about co-design with educators, and practitioners, and researchers, and students, and communities, relationships, and prioritizing relationships is really the nucleus of the work. And shout out to Dee. I had an opportunity to meet Dee and for our listeners, the way that Terri has described her is exactly how she is. So shout out to Dee for being that central location, the headquarters for all things BMW, that special glue.

You know, as you're talking, it's making me think about how there are two sides to this communication coin. You have the way that you are communicating and



working internally, but then there's also this external communication, the flowing out of information. And I know that's a big part of the work, the storytelling side, sharing the lessons learned with your key stakeholders, and I recognize that it is more than just about keeping them in the loop. but understanding what insights will be useful and helpful to them.

So I'm curious, how do you decide what information to share beyond the team? How do you determine what's truly relevant or valuable for your stakeholders and how are you navigating those decisions? What's guiding your thinking when you're choosing what to share and how to share it?

[00:09:09] **John:** Yeah. Well I could talk about that a bit. I mean, from the perspective of the external evaluator, first thing is, you know, simply asking, right? Because as the research team, we have a lot of information and that information isn't always needed, right when we get it. So a lot of it is asking Birmingham, asking Mind, okay, what do you all need to know at this point in the project? And then providing that information in a way that's useful, that's understandable, et cetera. Another kind of tactic we have as, as, as folks who do research in research practice partnerships is also kind of putting yourself in the place of those stakeholders, you know, so we're researchers sitting here crunching the numbers, thinking about how we're gonna answer the questions Birmingham and Mind want answered, but some of it's just saying, okay, if I were a district leader, if I were a teacher, if I were a product developer, what would I need to know and kind of how would I need the information presented to me? So it's the most actionable and useful from that person's perspective.

[00:10:19] **Sherenna:** Thank you for sharing that. John. I really love what you said about prioritizing relationships, and of course that is a foundational co-design principle that we elevate in our work. But I want to raise something that you were highlighting, and that's the importance of making information relevant. And making it easy to engage with, ensuring the right people have what they need. The fact that you have built that into your approach is really inspiring. And as you think about the issues you're working to address in the space of Math teaching and learning, and considering this idea of making information relevant, what is it that you are deciding to share and making sure that what you provide is easy for your stakeholders to engage with, especially in terms of listening to stakeholders needs, of course, while keeping your own goals in mind, ensuring mutual benefits, sometimes we can run into challenges around misalignment.

Is there a specific example or a moment when there was a point of tension in the work? How did you work through that together?

[00:11:28] **Andrew:** Yeah, I'll just start with the story. And then maybe Terri and John can, can add onto it. But I guess this is almost a teaser, we like reversed our order of researchings based on input from arbiters, other organizations, providing insightful advice and guidance and approval and review and also from the program manager level as well. And so that was a bit of a challenge. I'll characterize what got reversed. So we were going to do research into let's find some new kind of metrics so we can measure student engagement, student persistence, student motivation and then we'll use those metrics to choose a



product feature to do some research on. And the guidance from the rest of the team outside of BMW was, hey, do some hard product feature research like soon. And so we had to navigate that.

[00:12:35] **Terri:** It did take a bit of, uh, corralling because, you know, there was a metric minded, you know, let's look at what the data informs when it comes to a feature. And then there was the, the corner of, well, you know, we need to pick a feature. So having to get to a point where we could say, Hey, let's do both, and that's what we did. We actually used data to inform our first round of feature testing, but it was just a lot quicker than we thought it was. So it was definitely the best of both worlds. But we had to wrap our mind around like, hey, what's important? What, what is being asked of us right now? And how can we do that where everyone is satisfied? We didn't want to randomly pick a feature out of the air, and, you know, we definitely wanted everything to be data informed. So, what happened is that we had some preliminary data. Our preliminary data pointed to a feature and everything was great from there.

[00:13:32] **Sherenna:** That was an excellent example, and as you shared, there were a couple things that stuck out to me as being what I would call great models of partnership and co-design. The first is the example of how you reversed your research approach based on thoughtful feedback. So when we talk about ensuring mutual benefit, being agile and being flexible, all of those things are relevant to a partnership that succeeds because they foster trust, they allow for real time adaptation to changing needs, and it ensures that all parties feel valued, seen and heard, helping to align everyone toward a shared goal. So I loved hearing how you all are prioritizing those components. The second thing I heard you mention was around data, that you're using data to guide your feature testing, another critical component. When we're talking about partnerships that thrive, it's because they're ensuring decisions are grounded in evidence, helping align efforts with real user needs, and creating a shared foundation for accountability and impact.

And so using the example you just shared, for those listening, whether developers, researchers, or district teams, what lessons did you take away from the experience? And looking back, is there anything maybe you would have done differently and what key insights or maybe some recommendations can you share to others entering or currently navigating a similar partnership?

[00:14:54] **Andrew:** I'll just say I don't know that we could have done something different to avoid it. It's more of better plans and advice and guidance happen, as more people become familiar and it's how can you kind of deal with that? Sometimes the word pivots gets used, you know, be flexible. Don't assume there won't be anything, a major sort of shift like that. And, I'm gonna go back to the communication part. And just say it really was extremely helpful, as Terri was saying, you know, humanity first kind of thing. So we knew each other, by that time, we'd actually had face-to-face meetings, which is transformative and super helpful. And so we already had this level of, of trust, of shared goals and shared responsibility and, you know, nobody was looking to point a finger somewhere



else ever and things like that. So those kinds of things were, I think, really key in us not getting a little bit frantic when this came in. I mean, we just rolled with it.

[00:15:59] **John:** Yeah, and I would add from the researcher perspective, one of the key things as the external researcher is to do a lot of listening, you know particularly at the beginning of the partnership because, sometimes researchers, you know, come in with some preconceived notions about what the questions are gonna be or the methods we're going to use. But really because it's a research practice partnership, keeping your ears open, keeping your mind open as a researcher, being flexible, pivoting as needed so that the eyes are always on the prize, which is answering the questions that are meaningful for the district so they can improve math outcomes for their students, and so the developer can keep developing and it evolves into a more effective product.

[00:16:51] **Andrew:** What John's saying is that WestEd didn't walk in thinking they know all the answers and they were gonna be exactly determining how things go 'cause they are the research partner. It was very much a co-research type of mentality instead.

[00:17:06] **John:** Exactly.

[00:17:07] **Sherenna:** Wow, that's such a powerful example of what co-design looks like, what it really looks like as you center the needs and the interest of all stakeholders. And thank you, John, for highlighting something so important from the perspective of a researcher naming that it can be challenging coming into a space thinking you already know the right questions to ask, or you already know what direction to take; and that mindset, how it can unintentionally remove the sense of mutuality that true partnership requires. And so I appreciate you for acknowledging the importance of maintaining a collaborative spirit.

And that brings me to another point. As you're doing this really meaningful and impactful work, I imagine there are processes in place to help keep the partnership strong, to help keep that train rolling. You've mentioned things like human-centered design and the importance of two-way communication.

Beyond these, were there any specific agreements that you put in place very early from the start, like any guiding principles or values to ensure the partnership stayed grounded and aligned?

[00:18:13] **Terri:** I would say that from the beginning we knew that this was student and child centered, that the point was to increase engagement, motivation, and persistence, in our Black and Brown and underprivileged students in math classes. There was a human piece and part to what we were working on. Yes, we were looking at a program and how this program could help support that initiative. But all in all, this was about the students in Birmingham City and you know, we stressed that no matter what we did, this is about achievement for our students. Right now, the national math scores are terrible, and Alabama falls below the national line. And there's no point to this work if out of it the students aren't being helped and aren't achieving more. So that has been our pillar.



[00:19:18] **Sherenna:** You mentioned prioritizing students first and student achievement as being a part of your guiding principles and a pillar in this work, and that really resonates because ultimately the students, they are the ones most impacted by all that we are doing around teaching and learning. And so I appreciate you bringing that forward.

Does anyone else want to share something they've recognized as part of the guiding principles in this partnership?

[00:19:45] **John:** I would just say the element of respect. I mean, I don't think we formally, you know, discussed that at any point, but I think everyone here agrees that there's just a mutual respect for the knowledge that folks are bringing to the table, but also respect for what they don't know. So Terri's on the ground working in the district. She knows research. She knows how to talk about research and read it, but you know, she doesn't have that background and research the way I do. I'm bringing the research elements of the table. I care about the students, but obviously, I dunno if it's obvious, but I've never worked in Birmingham, I'm out here in California. So we're just always mindful of that. Everyone's bringing something to the table and we respect what everyone knows and we're conscientious of what they don't know about.

[00:20:34] Andrew: That not judging each other kind of thing.

[00:20:36] **John:** Yeah.

[00:20:36] **Andrew:** I think that's a, that's what was in my mind as well. It gets to just kind of a, a mutual trust about shared goals again. Uh, yeah. And, uh. I will say that as, uh, sometimes they call the role of my organization, like the vendor, and, you know, can we even trust the vendor maybe sometimes?

[00:20:57] **Sherenna:** Yeah.

[00:20:57] **Andrew:** Some people are thinking, to be a good researcher or to be, you know, laser focused on student achievement versus some other kinds of distracting things. So, getting to know each other and just, we didn't have to really, you know, whiteboard up, here's our top goals, because they were already shared.

[00:21:18] **John:** And you mentioned not everyone always trusts the vendor. Sometimes the external researcher is kind of like a chaperone on a date, right? It's not, people don't always necessarily want them there in many projects, but in a research practice partnership, you know, it's not like being a third wheel. You're definitely, uh. Everyone's, uh, keeps in mind how the research is there to help move the goals forward.

[00:21:47] **Sherenna:** I don't think we said this explicitly. **So just to clarify, how long have Mind Birmingham and WestEd been in partnership?**



[00:21:55] **John:** Well, with this specific research practice partnership, Birmingham, uh, really took the lead on writing the grant proposal and what that was maybe about two years ago, right?

[00:22:07] **Andrew:** It was in 2023. So, um, yeah, it's, we've been working together for about a year and a half pretty solid I would say, maybe a little bit more.

[00:22:15] **John:** Mind and WestEd have been working together for at least, you know, 10, 11 years. And then Mind and Birmingham have also had that relationship going back too. So it was kind of like bringing both of those elements together in the past year and a half, two years, for this specific work.

[00:22:33] **Sherenna:** Okay, so the partnership has experienced one full school year together, plus a little extra love.

And as you had wrapped up the first school year, were there any key takeaways that helped shape your priorities for next year, from the perspectives or the lens of a researcher, district team or developer. Now that you've built the relationships and now that you've had the meaningful in-person time, what did you walk away with and say, here's what we want to do differently, or, here's what we want to evolve or focus on moving forward?

[00:23:08] **Terri:** Definitely communication with teachers and the team. As part of our BMW team, we have some people on the ground in the classrooms with teachers and students, and we bring that knowledge back to the whole group, you know, what are they experiencing? What are we seeing? At the end of the school year, just about a month or so ago, we did some focus groups and we invited some educators to our BMW meetings so that we could hear directly from them and that has been really eye-opening. So as we start this school year, we'd like to make sure that our teachers and our students have more of a voice, not just someone bringing back their thoughts and ideas and what we saw that they experienced, but they are experiencing, and the things that they're seeing, firsthand.

[00:24:01] **Andrew:** I'll just, uh, add on a different part of this that, through this whole process, we've established relationships with many of what are known as the arbiters or other organizations. And so in the first year it was kind of meeting them and finding out overlapped interests. And then as the second year started to happen, some of them with whom there was great opportunity to go deeper, we did go deeper, including even student focus groups that were performed about math motivation with the program. Like some pretty relevant stuff, but actually happening outside of BMW teams. So there was a meeting of a bunch of different players, if you will; and then now we've kind of down selected to, uh, a smaller number that we're continuing on into year two and, and forward with.

[00:24:57] **Sherenna:** I want to stay here, but also bring in what we talked about closer to the top of the hour around communication and around ensuring that information that is shared out is accessible and meaningful to the stakeholders.



And you mentioned that you wanna make sure that the students and the parents and others in the community have more of a voice.

As you're gathering input from the parents and the students and the educators, how are you thinking about sharing that feedback back out, and so what we call, the feedback loops; how are you thinking about sharing that back out with them and how are you ensuring that they see the impact of their contributions?

[00:25:38] **John:** Well, again, you know, going back to the principle of thinking about what it would be like to be those individuals and putting the information, presenting the information in a way that's understandable and focused on what those individuals are probably most interested in. So when we go back and present our findings to students, it's really gonna be in language and in a format that's very accessible to students. And when we provide them with the information about what's going on in the study making sure it doesn't end there, actually eliciting feedback from them on how they interpret the results, what they think it means. We found that to be a very effective way to work with students in saying, okay, these are the math scores. This is what happened when we did this, uh, manipulation to ST Math. What do you think it means? You know, how do you feel about the product, et cetera? So it's kind of an iterative process. It keeps folks engaged.

[00:26:44] **Andrew:** Yeah, I'd like to add that I think there's an opportunity here for really breakthrough for my organization and some innovation. So John was kind of saying calmly "and the feedback to the students and teachers" and stuff, and I'm gonna say from over a decade of research grants that usually it's a one way street, and we get some wonderful students and some wonderful teachers and district folks.

[00:27:09] **Sherenna:** mm-hmm,

[00:27:10] **Andrew:** who agree to have data collected and stuff. And then we say thank you. And that's the last that they hear from us, unless they read, you know, articles in peer review journals.

[00:27:21] **Sherenna:** Mm-hmm.

[00:27:21] **Andrew:** Or something like that. So this possibility, I could see an innovation of bringing the teachers and students into the loop before the end of this grant, actually in the middle of it, and say, Hey, remember that motivation survey that y'all took? Anybody interested, students or teachers, in seeing what those kind of results were and helping us to interpret them? And stuff like that. So different from just "thanks for your data."

[00:27:49] **John:** Exactly.

[00:27:50] **Sherenna:** Yes.



[00:27:51] **Terri:** Mind research even created a, or gave us an impact rate study, or I think the first semester we worked together, we looked at some students and how their usage of ST Math affected the BCSS district benchmark assessment. And from the report from that when we shared those with principals, our principals were pretty excited about the impact that the usage had on the district's benchmark assessment, which led into starting the new school year with, you know, more excitement with using our program. So even from the first semester of us actually doing some work, we were able to take some data, share that with administration to continue our work.

[00:28:45] **Sherenna:** I am getting excited because when you think about co-designing, you think about partnerships and you know, feedback loops really are a marriage of the two. And so I'm just getting excited hearing about how you are not just collecting feedback and putting it on the shelf, but you're collecting it and you're applying it and sharing it back out with those same stakeholders. And that's so lovely to hear.

This has been such a rich conversation. I don't want to end it, but all good things must come to an end.

So as we wind down, I would love to hear from each of you how you are thinking about what's next for the partnership. And *somebody* has to tell me the story of BMW to our listeners. When we first met, they introduced themselves as BMW. I said, well, who is that? So please tell us the story.

[00:29:36] **John:** Well, from my perspective, you know, I'm really excited about going deeper into the student, uh, and teacher voice and parent voice aspects of a project. We've just kind of started that this past year, so next school year, I'm looking forward to going deeper in that regard. And then also, we're working as a team, not just on improving the program, the ST Math program, but also trying to improve our measurement of student motivation and engagement, persistence so that teachers can have some more and better real time information about how, the extent to which students are engaged with, not just ST Math, but math in general. And they can use that feedback to, you know, help them with strategies for motivating kids and getting 'em more engaged with math in the classroom. So that's gonna be really exciting. We're gonna dig into that next year.

[00:30:36] **Andrew:** Another researchy thing we're gonna get into, I'm really looking forward to is doing some measurement and even maybe some enhancements to how, ways that we provide supports for teachers to do the program and to understand the program and to get the most math learning value out of it. And so we wanna not just have a good idea and kind of throw it out there, but take this, you know, rigorous scientific kind of process and measure how much does a needle that we would like to move, move when we provide an additional type of support or whatever that might be.

[00:31:14] **Terri:** And definitely, math discourse, persistence, and deeper conceptual learning for students as a whole Birmingham City Schools. And we would like to build the capacity for teachers to continue this work once the grant ends. We



don't want this work to stop once we are done, but, you know, for it to continue to move.

And BMW, that's the exciting part. So, BMW. We thought about, you know, that's BCS, Birmingham City School, Mind Research and Mind Education and WestEd as a partnership. And then, and our, the name of our research partnership is boosting math wins, boosting math wins. So BMW actually has two meanings. So BMW is BMW-ing. We are boosting math wins.

[00:32:19] **Sherenna:** Love that. Yes. Beautiful and truly, it really does suit you well. It suits you well. It does.

[00:32:28] **Terri:** Thank you.

[00:32:29] **Sherenna:** Y'all. This has been such a good time together. I wish we could take it a little bit longer, but we can't. Before we wrap though, I would love to open it up to you all for any final closing remarks to share before we sign off.

[00:32:48] **Andrew:** It is so wonderful after almost 20 years of doing research to have our district partner in the room where it happens. Meetings every other week, and sharing goals, and helping make decisions, and even smoothing the way for a new kind of survey perhaps to go in front of the teachers and students at the district. So that's just, I want to do that in every future district research program that I have. It's so great.

[00:33:19] **Terri:** I would like to say that, for future, for future partnership to prioritize the relationship over roles. If you know each other's why and why you're doing this, um, it'll help you partner for the sake of the work, and not for the sake of the grant.

[00:33:39] **John:** Yeah, and I would just say to other researchers out there that doing work in a research practice partnership, doing research with partners, not on districts or schools, is a very rewarding experience, because you have partners who want to be part of the research. They're, you're not there as an external evaluator because they have to do the work. They want to do the work and learn from it. So, um, it's a great place to be in as a researcher.

[00:34:11] **Sherenna:** Mmm. I love that. This has been absolutely fantastic. Thank you all for sharing the incredible work you're doing in such a meaningful way. I truly believe that you shared some really, really great information that is going to resonate with so many others. Whether they're just starting out already deep in the work or ready to dive in even further, you have offered valuable insights for anyone in any space of navigating a partnership, like this one. So a big thank you to Andrew, Terri, and John for your transparency, your authenticity, and your generosity in sharing your journey. The best work takes intentionality and it takes effort, and it is clear that you all are modeling that beautifully.



Before we go, I have to shout out Anny. There's a whole lot happening behind the scenes, and so shout out to Anny, our executive producer and audio engineer. This would not have been possible without you.

And before we go, I want to remind all of our listeners that great educational innovation happens through collaboration.

Thanks for joining us, and until next time.

