

**Michael:**

Hello, I'm Michael Rendon, your host of Beyond the Bell, a podcast produced by Animas High School of Durango, Colorado.

**Greg:** And I'm your co-host, Greg Phillips. This podcast series asks the question, what must our education system do to best prepare the next generation of students, Gen Zers, to lead meaningful, fulfilling, impactful, purposeful, and satisfying lives? No small task.

We'll begin each episode speaking with a local high schooler, college student, or recent addition to the nine to five workforce to hear about their educational experience, their lives, and their visions and hopes for the future. Next, we'll talk with local experts about how we can ensure that education is meaningful, challenging, and engaging. We'll look at what's working and what isn't. So join us as we rethink education for a new generation, because we believe preparing for the future means more than just passing tests. It means empowering young people to thrive, lead and shape a better world.

Today, I'm visiting with Harper, a 2023 graduate of Animas High School. Harper's coming to us from Bozeman, Montana, where she's a student at Montana State University. Welcome to Beyond the Bell.

**Harper:** Hey Greg, thank you for having me on today.

**Greg:** How are things going up in Bozeman?

**Harper:** They're doing great. I'm just enjoying the weather and taking some summer classes.

**Greg:** Oh yeah, what are you taking?

**Harper:** Right now I'm in physics two and calculus three.

**Greg:** Piece of cake.

**Harper:** Yep, super easy.

**Greg:** How is that? How is it for you? How are you doing in your classes?

**Harper:** Physics has been, it's been alright. I think I'm doing pretty good. We don't have any exams, so just homework, which is pretty fun. And my Calc 3 course is actually online, so that one's a little bit more independent, which is hard.

**Greg:** So are you interested in the STEM areas? Is that your focus?

**Harper:** Yeah, I'm aiming to get my bachelor's in chemistry, just professional chemistry, so I'm kind of getting my core requirements out of the way.

**Greg:** And I understand that you, after graduating, went to CU and ended up transferring to Montana. Tell me a little bit about that.

**Harper:** Yeah, that's right. I went for my first year as a freshman, so I lived in the dorms and everything in Boulder. I was still on the same degree path, so that hasn't changed. I was always in professional chemistry, but I didn't really feel like that was the place for me. So I moved on to Bozeman, and I'm here now.

**Greg:** Now that you've had some space between high school and where you're at now, what jumps out in your mind as to what was the most influential aspect of your high school years?

**Harper:** It was definitely my relationship with my teachers and also with my peers. I thought that being able to have someone teach me humanities, but also go on an art trip with them in the spring and have a good relationship with them changed the way that I was able to advocate for myself and the way that I was able to learn and get help in an education environment.

**Greg:** The Animas approach is to use project-based learning as the mechanism for teaching students. When you get to college, you're not always involved with project-based learning. How was that transition for you?

**Harper:** That one was hard. I went from project-based learning, where it's pretty hands-on, and getting to make my own presentations and my own projects and kind of decide my fate to a system where I was taking a lot of exams, writing a lot of papers, very rigid curriculum. And that was hard at first, but I actually did kind of enjoy it because it felt like a challenge having to learn to change the way I think and the way that I respond to an assignment.

**Greg:** You mentioned writing papers. We've been having conversations about the role of AI in education. Tell me a little bit about how or if you're using AI.

**Harper:** AI is super tricky. I actually am using it and I used it today, but it's not sort of in the way where it's completing an assignment for me. Instead, I'm using it as a tool to help me. I'll just give you an example. So I just landed a research position and it's kind of over my head. It's a little bit more advanced than I have gotten so far in my chemistry program. So I was assigned to read a research paper and I'm going to be following their synthesis procedure that they used for the research paper and I have to figure out how to redesign it and use it in the fall so I can synthesize the same molecules that they did. And it felt like every other word I was getting stuck. was like, I don't know what that means. So I got about four pages into it and I was like, I haven't learned anything. I have no idea what's happening. So I used ChatGBT. I gave it the paper and I said, I need some key points. I need you to pick out the really important terms so that I can learn those so that the next time I read that paper, I know what I'm looking at and I'm able to absorb the knowledge. So that's how I've used it. For writing papers, I don't have to do that much because I'm not in the humanities, but I have used it to help me outline stuff and I've noticed it never feels really authentic and it doesn't feel like it's flowing the way that I want my paper to be.

**Greg:** What about cell phones? Let's talk about that. Are you addicted to your cell phone?

**Harper:** Yes, incredibly. And I have gone through many phases of trying to cleanse myself from my phone. It's really hard.

**Greg:** What sort of approaches have you tried? Is just going cold turkey and shutting it down?

**Harper:** Yeah, making myself run errands without it, or I don't need to use GPS. I can just look at the street signs and figure it out because I know where I live. I've tried turning my phone to grayscale, so no colors on my phone, so nothing is intriguing to me. I don't want the flashiness, but that doesn't really do anything. Screen time limits, but I just ignore them. So really, it's training myself to do other things without it so that I don't feel the need to reach for it anymore.

**Greg:** You're probably not alone in feeling the struggles over the phone. Do ever talk about it with friends? Is it something that comes up with your peers?

**Harper:** All the time, all the time, I actually started this thing called an activity bingo with my friend and she lives in Boulder. Actually met her my first year, but we're getting a bunch of things done in the next couple of weeks before school starts. And one of them is to get our screen time down to like two hours average a week. And that's been really hard. I think most of my peers feel the same way that I do where it's an issue and it's interfering with the things that we want to do on a day-to-day basis. And there are things that I want to experience where I'm not seeing people holding their phone in their hand. And it definitely changes the way that I am experiencing something. I guess that's the best way to put it. Like if I'm going out to dinner with my friends and someone's picking up their phone every two minutes, that's definitely like I'm noticing it and I don't want to be that person.

I just, really do think that everyone is struggling with it, especially in downtime when, you know, you're tired or you just got out of your classes or whatever. It may be you just got off work and you want to scroll for a little bit. But I do think that most people are on the same page of like, we know it's a problem. It's just really hard to get to stop it.

**Greg:** Mm-hmm. Yeah, that's amazing. It's so addictive. It's hard to pull away. What about social media? Do you spend much time on social media?

**Harper:** I used to, I was definitely very addicted to TikTok for a while when I was in Boulder and in high school when it came out or when I started using it, it was like an issue. And my parents were like, okay, you're on this all the time. And so I deleted it. I haven't had it for I think a year and a half maybe. Snapchat was a big one for me. I felt that if I didn't have it, I wouldn't be connected to my friends and I wouldn't know what was going on.

But every time I was on it, I felt very annoyed and it was obnoxious. And I was like, I feel like I'm obligated to send everyone a picture of my face all day long. I don't want to do that. I just like don't want to have this time commitment to other people. So right now I've really been enjoying the mysterious ghost person on social media where not everyone needs to know what I'm doing all the time. Like I can just do my own thing. And I still have Instagram, but I have like five posts and I don't really think about it much.

**Greg:** You've grown out of it. Do you... Do you pick up the phone and call, friends?

**Harper:** Yeah, I do. It depends though. I do have some friends who are pretty busy all the time. But yeah, I don't really text people often and I think that gets to some people because they're like, where have you been? I'd just rather call.

**Greg:** It's amazing how it's not only a language, but an expectation that if I sent you a text and I don't hear back from you, I take it personally, right? Why are you not responding? You should be responding. This is the etiquette of digital communication.

**Harper:** Right? It gives people this sort of feeling like you owe them attention and that you should be there all the time and you need to be accessible because we have iMessage. But if we only had a phone call, you you're not going to be calling your friend every two minutes, sending them pictures of your dog or whatever it is.

**Greg:** What do you think about the idea of schools implementing cell phone bans, both middle school and high school level? I'm curious what your thoughts are on that.

**Harper:** I think that it would be great not to have cell phones in a learning environment, but there are going to be students who are used to having access to their cellular device 24-7. And so why are they going to want to go to school and all of a sudden not have access to it? And I think that's where it gets tricky. There's also the argument of their parents needing to get in contact with them. I mean, I think in an ideal world, there should not be phones in a school, in a high school.

I think middle school definitely doesn't make sense for a 12 year old to have an iPhone and be scrolling on Instagram in class because they're there to learn. In high school, I think it gets a little bit different because that's when people are starting to drive and that's when they're, you know, some people are turning 18 and they're really feeling like they're maturing into a different level of their life. And having a phone is something that helps them with that. It can, or it can feel vital to that.

**Greg:** Did your family have any rules or laws at home about cell phone usage or technology usage?

**Harper:** Yeah, well originally my mom said that she didn't get her first phone until she was like 26, so I wasn't going to either. That didn't work.

**Greg:** And she used to walk through the snow to get to school.

**Harper:** Uphill both ways. So it was real hard for her. I actually got my first phone when I was 13. I was in middle school and I was late compared to my friends. I was like, they've all had their phones since they were like eight. Where's mine? For a little bit, I had like a mini iPad and I could play Minecraft on it. That was about it. My parents weren't incredibly rigid, but they were very clear that I was not to spend excessive time on the internet or on any sort of social media or on my phone, whatever it is.

So typically growing up, it was like, leave your phone outside of your room when you go to bed. We expected to be out here charging by 9 p.m. Or whenever the screen time accessibility came out, they used that a lot.

**Greg:** When you think about the future, what do you think a successful adult life looks like?

**Harper:** I would say a successful adult life for me kind of looks like having the flexibility to work a job that you love and do the things that you love and spend time with people that you love without having to worry necessarily about anything else. And I guess for me, most of that worry is financial. So I'm not saying that being rich is any marker of success, but I would say that when I look forward, what I want to be doing is the things that I love and not have to be held back by worrying if I'm gonna make rent or ever be able to buy a house.

**Greg:** What makes you most nervous about the world that you're inheriting?

**Harper:** My gosh, I don't think you want to get me started on this.

**Greg:** I do, I wanna get you started.

**Harper:** There's so much. Obviously the climate is a very big one, but that definitely can feel way too big sometimes for me to really even think about, because I'm not really sure, you know, I'm not gonna solve it, but it's there and it's looming all the time. So that freaks me out a lot. I also have been recently within the last year freaked out about human connection, largely due to phones and not seeing my community or my environment really being shaped to fit

humans in sort of a social aspect. Like, it's incredibly hard for me to bike to campus because we have no sidewalks and that's like, well, they don't really care that we can't bike anywhere so we have to drive everywhere. It's really hard for me to go find something to do with friends where we don't have to spend \$40 on food just to hang out. That can kind of seem sort of trivial. It's right now summer and I'm only taking two classes. So when I'm not doing homework, I want to be experiencing life and it doesn't feel like there's opportunity to do it without phones or without spending money or without worrying about anything else.

**Greg:** So Harper, if you take your junior and college self and you time travel back to your freshman self, what advice would you give yourself?

**Harper:** I would definitely tell myself to not dwell in the future, but definitely give myself a leg up because I wasn't taking advantage of concurrent enrollment classes or being in this club or that club. I was before the pandemic actually, but then that happened and that kind of slowed my role a little bit. But I would tell myself to get out into the community and find things that I'm interested in and do them and meet people and get experience.

If you're serious about something, if you want to do it in the future, I definitely think that putting yourself out there and getting as much experience with that is really, really important because one, you might find out that you don't actually like what you're doing. And it's good to know before you start piling money into a bachelor degree.

**Greg:** Push yourself to seek experiences and opportunities. Get off the phone, get outside, connect with people.

**Harper:** Yes And if you're scared, then do it scared because you have to do a lot of things scared. And I think that held me back a lot was being nervous about things. But once I started doing things scared, I realized it's not so bad.

**Greg:** Great advice. Well, been a total pleasure talking to you, Harper. I think you've got all the right stuff, and I'm wishing you all the best. Good luck in your remaining years up at MSU.

**Harper:** Thank you so much for inviting me to be on the show.

**Michael:** In today's episode of Beyond the Bell, Living in a Digital World, we're speaking on the topic of technology and more specifically, the use and impact of technology in education. Today we're joined by Dr. John Fisher, an English professor at San Juan College who just won a Distinguished Teaching Chair Award for his innovative work on integrating AI into the classroom. Additionally, we're joined by Shane Voss, the Executive Director of Mountain Middle School who was named Colorado Charter School Leader of the Year and who actually banned cell phones at his school years ago. Welcome both of you to the show.

**Shane:** Thanks for having me.

**John:** Thanks Michael, it's good to be here.

**Michael:** So John, I'm going to start with you. So right now we're living through what some would call the greatest technological shift in human history. Are we preparing students for this reality or are we still just trying to make sense of what's really going on?

**John:** Yeah, I think we are trying to make sense of what's really going on. We've got two things we're talking about today, cell phones and artificial intelligence. And I think in some ways the cell phone landscape has settled and I'm really looking forward to hearing what Shane has to

say on that. As far as AI goes, I think we've got a long way to go to understand what the impacts are going to be. So I think even those of us who are really engaged with AI right now, I think about it every day. I'm always working on it.

I still feel like I'm playing catch up. And I think there's a lot of folks who are really just starting to notice or don't even know much about it at all yet. And going forward, who knows what the landscape is going to look like in five or 10 years. So I think we're going to be playing catch up with AI really for the foreseeable future.

**Michael:** Shane, what are your thoughts on that? Are we preparing students for reality or are we trying to make sense of what reality is?

**Shane:** I would agree with what John said. The AI impact is yet to be determined and it's changing so rapidly day to day. There's not much research that's been done yet. And so I think we're at the beginning of that wave, even though it's been around for a while. mean, teachers have been using it, students have been using it, but the cell phone thing is a very different animal, different landscape. The research is very solid on the impacts. And I think there's just been much more research done on that topic and how it's impacting student learning and mental health.

**Greg:** Which we'll get into for sure. John, tell us a little bit about what this distinguished teaching chair award actually was all about and what does successful AI integration actually look like in practice?

**John:** So the Distinguished Teaching Chair is something I actually applied for, and it lets me kind of define my own project. So last year I was responsible for organizing a cross-campus committee at San Juan College, where we created our AI policy for the college. And then in this coming year, I'm going to be kind leading professional development at the college. I'll be the speaker at our fall convocation, as well as leading bi-monthly discussions on ways to integrate AI into the classroom as well as just a book club where faculty read the latest books covering AI.

**Greg:** Sounds like it was a pretty exciting opportunity for it to be right on the cutting edge. What does successful AI integration actually look like in practice?

**John:** Yeah, I think you really have to start with how do we know what our students know? It's kind one of the most fundamental questions of teaching. How do we know what our students are learning? And when I look at any given piece of student work, it's really important that I'm able to separate what can the student do versus what AI can do. So we're kind of in an epidemic of cheating right now, I believe. I don't know what the research says about that, but just in my own experience and knowing what these tools are available, having been a student myself, my guess is there's a lot of student work.

There's really AI work that's getting passed off as student work right now. AI detectors are very limited in how useful they can be. The first part of effectively working with AI in the classroom is finding a way to make sure we know what the students can really do apart from AI. In my case, I teach a lot of community college freshman composition. I teach about 50 % online. Even in my online classes, have students write their essays under proctored exam settings right now. They have a locked down browser. There's a webcam on them. They're not allowed to use outside resources. So when they write their essays, I really know what they can do. Making this move has opened up the AI design space for me.

So now in my assignments building to that proctored exam, I can use AI in all sorts of creative ways, teaching students how to learn with AI, teaching students how to use AI, teaching students the strengths and limitations of AI.

And now it's really seamlessly integrated into my curriculum on multiple levels. It really can do so much in education once we can get over that initial barrier of it being the most amazing cheating tool ever invented.

**Greg:** I can really see the value of what your focus is this year in terms of teacher development. It seems like there's not only a huge learning curve for the students, but for the instructors as well as how to not only deal with this tool, but how to use it.

**John:** 100%. It's a tricky tool to learn how to use. Hallucinations are a huge problem. There's weird little subtle things that you learn when you interact with ChatGPT a lot. I really work on having students use it as a research tool. And for the longest time, I could not get it to stop citing Wikipedia. I'd build custom GPTs telling it to not cite Wikipedia. I build prompts for my students to copy paste into GPT. And it would say five or six times in the prompt, don't cite Wikipedia. And again and again, it returns Wikipedia. I just learned though, if you put it the very end of the prompt, you just say, as a last second check, please go through and remove any Wikipedia links and replace them with links to college appropriate sources. It now no longer cites Wikipedia. And so all my students now can use it as a research tool and it won't cite Wikipedia. I mean, I could just list tens of examples like that where you're working with this new technology, but it's so weird that the only way you really learn these little tricks, these little ins and outs, is by just kind of playing with it over and over, testing it again and again, and you start to get a sense of what it can do and what it can't do. So I think I'd really encourage all teachers to be playing with it.

**Greg:** Of course, just when you think you've figured it out or come up with a hack or the tip, it's evolving rapidly too. So it's different now than it was a year ago. Shane, let's shift over to you. You banned cell phones years before it became trendy. I think you said 13 years when we were talking before this. What drove that decision and what have you learned?

**Shane:** The genesis of our phone policy arose because La Plata County had one of the highest teen suicide rates in Colorado when I first took over Mountain Middle School 13 years ago. And I really was trying to set the ground and work for a turnaround. And I sought to establish a school that truly provided a safe environment for all students.

I had spent my previous 15 years as a classroom teacher prior to becoming the executive director of Mountain. During that time as a classroom teacher, I quickly recognized the negative impact of cell phones had on students. As a new principal, the first priority in creating optimal learning conditions was a cell phone ban. And so I implemented this policy and the subsequent positive impact on students' learning and mental health was remarkable. Schools have been grappling with this while students continue to struggle with 24-hour cyberbullying, it's not just during the school hours anymore. It's all day long, all night long. They're struggling with sleep deprivation, social deprivation, attention fragmentation and addiction, which many of the apps are designed to do. So during the school days, students are often pressured to waste their time responding to Snapchats, Instagram posts, texts, constantly comparing themselves to others in unhealthy ways. So cell phones play an underestimated role in the current teen mental health crisis. And much of this sadly occurs during the school hours.

So unintentionally, we've caught some press about this. So we were featured in Jonathan Haidt's New York Times number one bestseller, *The Anxious Generation* as the model school. So I get a lot of people reaching out from really all over the world that have read that book. And

then we were featured in a documentary called Trust Me and then the PBS World News. And there's just a lot of presses come from this common sense thing that we did years ago. And just simply wanting to teach etiquette and being fully present and giving your full energy to whatever's happening in the classroom.

And yeah, the results have been pretty positive.

**Michael:** Shane, is it fair to say that you're trying to make schools a safe place again? mean, is that part of it as far as the cyber bullying or a place where students can just relax and not have to deal with that world or am I thinking about it differently?

**Shane:** It's a safe zone, yeah. And I think what we've learned over the course of time is the students appreciate it the most. It is like a dead period where they don't have to worry about responding. And they can just be kids. And it's amazing the games they create on the playground. The school leaders that come and visit our campus and see it's a heads up culture, they notice it right away. No one's looking down at their phone and they're all playing and interacting and talking. So we don't allow the phones to be on when they even enter our building, have to be off and in their backpack and not on and used again until they exit the building at the end of the day. And so the feedback has been really positive with other school districts. we have 25 states now in the United States that have implemented a ban. testified last spring for a House Bill 1135, which was passed into law in Colorado requiring all schools, all public schools to have policy starting this school year on cell phone use. And you're seeing the countries around the world adopting the same thing. There are several just this summer. The Netherlands, you saw China, Russia, Sweden, Norway, the entire UK, mean Brazil. So it's kind of, it is, it's not kind of, it is a movement.

**Michael:** So I guess the question for both of you is how do we think about technology and education? Because on the one hand, AI is kind of phenomenal and it can do all these sorts of things and calculators or other means of technology that are really great. But then on the other hand, we're also banning certain technology during the school year as well. And so what's the nuance there? Like how do we determine what's appropriate technology for schools and what's not appropriate?

**Shane:** We also have been a one-to-one laptop school since I took over the school 13 years ago. So every student has a school-issued Chromebook. And every student starting in fourth grade, all five years at Mountain were fourth through eighth grade, is required to take a digital media class. And so within that class, learn epistemology. They learn appropriate use, digital citizenship, etc. So we are fully embracing technology and being able to create with it amazing things and products with our project-based learning platform. They're able to do that because they're not distracted with their phone going off all day and they're able to focus in Socratic seminars and their group projects. Just by removing that layer of distraction, the academic growth achievement, the engagement just rose exponentially every one of our classrooms. And the data has shown that with the achievement results of the school.

**Michael:** So it's not that you're anti-technology, it's just that it's appropriate technology for the students and where they're at.

**Shane:** We're trying to teach etiquette and epistemology, those two E words. But the etiquette piece is really tied into our habits of heart and mind with respect. And a lot of what we have to teach because the students are going home and experiencing this with their parents. I mean, we see these families out to dinner at restaurants and every kid's on their phone. Both parents are on their phone. No one's talking to each other. So we're teaching the very basic things of respect. And I tell my teachers, I can gauge the level of respect in your classroom in the first 30



seconds. Are your students looking at whoever's speaking, whether it's a student or the teacher, with their eyes, listening with their eyes and their ears, those very simple things. The cell phone is tied into that. This technology came along so quickly, parents weren't prepared for it, schools weren't prepared for it. When I was teaching in the classroom, the school had no policy is just teachers do what you need to do to survive the school day. And you were just fighting this urge to look at their phones, check out, as soon as it got hard, whatever the lesson was, they would check out and just go onto social media. So we're really creating that culture of learning, optimal learning environment. And that's what the cell phone thing is all about at our school.

**Michael:** John, how do you think about that balance between what's an appropriate technology versus what's inappropriate as far as an educational setting?

**John:** Shane, I love the work you've done with cell phones at Mountain. And I actually didn't, I've read much of Haidt's book, but I didn't know that you guys were referenced there. So that's amazing. Congratulations. You really are the front of a really important movement across our country. I think it's pretty simple with cell phones. They don't really contribute that much in terms of helping us become better people. They're a useful tool, but they can be such a distraction and addiction. All the things Shane said.

I just wholeheartedly agree. AI is a little trickier right now because it is a really powerful learning tool. It's still in a pretty nascent phase, right? It's still in kind of its infancy, I think. ChatGPT was first released November 22. We're not yet three years old. And I think that there's some pretty interesting technology coming with AI that's going to be problematic. Once all kids have an AI friend on their phone, something they can talk to, relate to something that doesn't provide any friction, something that's really like a yes man, a sycophant, and only just wants to make the kid feel good, that can be really problematic. On the other hand, I've had, I've got maybe a personal challenge in my life. One of my kids is behaving in a kind of way that's frustrating me, and I can put that into AI, and AI will give me amazing advice, like stuff that I really implement and use. And I can only imagine struggling as an eighth grader socially and how I could describe that social problem to AI and it might come up with some really useful suggestions for me to make my life better. I don't know what it's gonna look like. This technology is really evolving.

Currently, I think it's a matter of using it as wisely as possible. I personally, I have an eight and a 10 year old, almost an 11 year old and I don't let my kids use AI. I'll just give a real quick anecdote. One time they were trying to build a pillow fort last year and I was letting them use the AI voice mode on my phone. And instead of just building the pillow fort, they were arguing about the suggestions that AI was making out of the voice mode. And so instead of building a pillow fort, we're now arguing with my cell phone and the AI voice. At that moment, we banned AI for my kids completely. They now have to ask if my daughter wants a picture of something, she'll ask me and I'll generate it for her. But I generally think unless this technology is used in a supervised, targeted, specific, thoughtful way, I wouldn't want my kids to just have open access to it, even though the potential benefits are really, really significant.

**Michael:** John, I have a question for you about AI. And the argument is that it's making students intellectually lazy. Like instead of having to write a paper, they just have AI do it for them. Instead of thinking critically, now they just type it in and see what AI thinks about this argument or that argument. So how do you think about that? And how do you ensure AI enhances rather than replaces critical thinking?

**John:** I think by and large it probably is making students intellectually lazy currently. I don't think it's a necessary outcome of the technology. It's so easy. It's so accessible and it just

gives you what you ask for in such a truly amazing way that it's hard to get away from. But Carnegie Mellon and Microsoft did a study last year just looking at how AI is being used. It showed that I think 60 % of the users, don't quote me exactly, but give or take, did use AI in kind of an intellectually lazy way. They would just put it in there and what would come out would come out. But then they've got all these really amazing quotes in the study itself from people who are using AI thoughtfully, where they'd say things like, I mean, it just gives me a bunch of platitudes and garbage. I cannot send this in an email. So if you're really thinking about it, there's a lot of critical thinking that goes into AI, from prompt engineering, from knowing what kind of tasks AI is good at and not good at. And then from once it creates that, you still have to read that and then edit the final statement or even decide it's total junk and then you still have to read it yourself. So to use AI well involves a ton of critical thinking. And I think that study does back it up, even though that wasn't the headline that comes out of it.

I teach students who are first generation college students, many of them bilingual or their first language is not English. And when my students come into my class, I worry that they're going to see what AI writes this perfect kind of standard English. And this is their idea of what they're supposed to come to college to learn. And I worry they're going to see that and get turned off and think, wow, I could never do this. I'm just going to let AI do it for me. And doing the work yourself is just, it's more important than it's ever been and who we are as people. I'm really interested in just shifting towards the humanities and thinking about what does it mean to be truly human? What are the most essential articles people need to understand? Not have AI recite for them, but actually have to read and process deeply so they become part of who we are.

I think there's just needs to be more emphasis on who we are as people, what our attention diet is, what we understand, what we actually know. There's this idea, everything's on the internet, AI can do anything. We don't really need to know anything anymore.

And I would say because everything's on the internet, because AI can do everything, there needs to be more emphasis on what we really know and what we really understand as individuals, not what we can just look up.

**Michael:** Well, and I think that human connection's big because one of the ways I think about it is AI collects everything that's on the internet. Great. What's on the internet isn't the best of humanity. It might be the worst of humanity. There's so much missing now. We used to say, well, when an old person dies, it's like losing a library. You lose all that information. And so we have all these old people who have no idea how to use the internet. AI is like accumulation of all the knowledge. It doesn't have any of their knowledge. It's just the people that actually use AI. Is that a fair way to think about it or am I off on that?

**John:** It doesn't have an identity, it just recounts language. It's kind of like this synthetic language that it's creating. If you think of someone who's never had contact with the internet and the accumulated meaning and wisdom of their life, then of course AI is never going to come close to that. Let me not say never because who knows where this is all going. But AI at this point does not come anywhere close to the deep kind of human meaning I think that you're getting at with that. As a more instrumental tool, I mean it's profoundly powerful.

I need to get this done, help me out. It can help you do anything from write a book to deal with your personal, of interpersonal, emotional issues. It's an amazing coach. I coached my kids' basketball team for the last couple of years. It's fantastic coming up with drills and ideas to engage kindergarten and first graders in basketball. It's amazing at taking a super boring lesson in MLA format and making it more engaging. So instrumentally, if you have a goal, it can

really help you get there. And so this tool is so powerful, but we can't mistake it for real human wisdom, for real human lived experience.

**Greg:** Let's shift a little bit to sort of the neuro-physiology side of things. We know that the adolescent brain is still developing executive function and impulse control. How should this influence, as an educational institution, our approach to educational technology?

**Shane:** Yeah, I think we have to strike a balance for sure. I'll kind of straddle both worlds of AI and cell phones. I think the research is there with the amount of time teens have been immersed in their phones and online and the effects of brain development, mental health, especially in young girls. It's much worse than the young boys.

We, in a sense, we were pouring gasoline on a fire with just throwing the phones in there and they're getting them at a younger and younger age. So most of our fourth graders have a cell phone, but they just don't get to use them during the school day. But soon as school's out, man, they come out of the backpacks and they're right on their phones. In terms of just technology in general, to your question, I think there is a balance. And that human element that John's talking about is a lot of the philosophy that I truly believe in that.

AI can't replicate, a cell phone can't replicate the power of being in a Socratic seminar, doing field work, doing an exhibition, doing a presentation of learning, collaborating and doing some ideation with a group in a project. You can't simulate that with AI and you can't do it, know, everyone can get on their phones and just collaborate, right? So that human element, we learned this during COVID.

And this is where we should have learned a really big lesson. I see a lot of the companies sending me emails every day to buy a full AI-driven curriculum. I think we got to be really careful as educators because that is what it looks like to me is very close to an online experience, remote learning experience that a lot of our kids went through during COVID. And we saw that didn't work. So to me, there's the balance of the human interaction and collaboration and those human skills that are timeless. Schools must hang on to those.

Supplement it? Yeah, I use AI all the time. I make my newsletter into a podcast with one click of a button on Notebook LM. It's awesome. And my parents love it. They can listen to the newsletter as they're driving home instead of trying to read it. So there are a lot of really cool ways to use it, but it can't replace the human element.

**Michael:** John, can you walk us through a specific example of how you use AI in your English classes? And things like what's a learning objective, how does AI help achieve it, but also what guardrails or ethical considerations would you put in?

**John:** Actually, I can give you two that show kind an interesting contrast. So the first, one of our outcomes is just students can edit and revise their own sentences. This is a thing that AI does brilliantly, that you really only develop the skill if you practice. I call it wordsmithing. You can teach a lot of formal grammar, but in my experience as a teacher, what students really need is just time kind of word smithing their sentences, just taking a sentence trying to change a word, trying to change a phrase, just engaged in that process of really trying to word by word, parse it all out.

So I've developed an AI prompt that students put their essay and the AI prompt into ChatGPT. And it took a long time to get to this prompt because it wants to just rewrite their sentences for them. It wants to give them all the answers. But I figured out a prompt that stopped ChatGPT from doing this. And instead it gives them one of the sentences back that needs some work.

And it just makes a couple of suggestions. And then the student revises the sentence based on the suggestions. And then it makes a couple more suggestions until it's happy with that sentence. And then chat GPT will give them another sentence. And so it's just this, this one-on-one wordsmithing coach. Honestly, if a student just spent a lot of time with this, they could learn how to write fluent English totally on their own. There's no limit.

I can sit there with students and do that, but there's a limitation for as many students as I have in all my freshman comps sections. I can do that once or twice with every student. But chat GPT, there's no limit on how much it can do. There's definitely an ethical consideration when you're turning any information over to AI. So I usually do this activity with something that's more of a, like a research paper doesn't have a lot of personal revelatory information. So, so that's one example and it's fantastic.

My students love it. My students at the end of the semester cite it as one of their favorite AI activities. And I can see the real progress that's happening. It's kind of funny because it takes what AI does that I think is really detrimental to learning, which is it'll take students' sentences and it'll just rewrite them. So I work with a lot of adult learners at a community college. And one of the things that's important for all learners, but especially for adult learners, is this idea of metacognition. So it just means thinking about your own thinking.

If a student comes to a writing class with a lot of emotional baggage, many of my students come to my classroom believing they don't belong in college, really wondering if it's the right fit for them. And they've often had very negative experiences around writing in school. They're not confident by and large. I've developed a series of metacognitive prompts to help students interact with how they're thinking about their own writing. One is just talking with Chachie P.T. about their confidence.

And it's really incredible. It's an incredible coach in that regard. Gives students great suggestions for how to improve their confidence. It's very encouraging. I read all of these interactions. So I know. So I can see if anything's getting weird or if chat GPTs, you know, if we're going off in a place that feels unsafe. So that's how I make sure that there's some quality control there is I have to read every single one of those conversations. I haven't copy paste the whole chat into the assignment.

But I've seen an incredible growth from students on this metacognitive level on this engaging with this idea of how do you become a writer? How do you become a confident writer? And chat GPT is just completely customized for them. They just tell it where they're at and then it can come back and give them suggestions to move forward. So from a very technical skill, like wordsmithing to just a larger kind of metacognitive coach, there's a huge range and how this technology can be helpful in the classroom.

**Greg:** Interesting. Shane, I imagine you've dealt with parent pushback on the phone restrictions. I'm curious what some of the concerns you faced and how you've handled it.

**Shane:** I'm gonna just honestly say we've had very little, if any, pushback. In fact, our wait list has grown because of it. Our parents are really wanting their kids to be in a cell phone free environment, learning free of those distractions. So we've had a lot of fans from our parents applauding what we're doing. We do have a live voice as our site manager that they can call anytime they want to get ahold of their kids. You're starting to see a little bit more, you know, trying to work around it with the smart watches, you know, or they're texting their kid during a day. But we just don't get much, if any, pushback. In fact, just more and more people wanting their kids to be in the school and that in that type of culture.

**Michael:** Shane, I have a follow-up question on that. It totally makes sense to me to not have cell phones in middle school. I teach at the college level, and it's a different animal. Students are paying to be there. Some students take notes on their phone. If they want to just, I don't know, play games the whole time, that's their choice. It kind of depends on if it's a lecture or if it's part of it. It's just kind of a different animal. What about high school? Because I've heard, well, high school is different. They're a little older, more responsible, they have their own phones, they have to be at soccer practice, maybe they have to pick someone up after school, blah, blah.

What do you think? I mean, middle school seems like a no-brainer. Should we ban cell phones from high school?

**Shane:** In my opinion, yes, that's the level I taught at for 15 years. And, I felt like a lot of those kids were completely distracted. We were dealing with all kinds of discipline issues throughout the day with the, the bullying is happening on the phones. Very little of that's happening face to face anymore. Like when we were in high school. And so how does a student focus in class when they just opened something that's demeaning or, you know, a threat or it's just the nonsense that happens throughout the day. And so, you're seeing the 25 states out of 50 that have implemented these restrictions and then all of the countries throughout the world. And you can either have a country club or you can have a school. It can't be up to a teacher. And I personally don't think it's very effective to just say they're not supposed to use them during class, but they can use them during passing time. And then you have an open campus. And I just feel like the issues are compounded. And it's a big problem at the high school level, that's when I was a teacher trying to deal with it.

**John:** Couldn't agree with you more. Having taught high school for a few years before I was at the college level, and I think it signals to our kids that it matters when we put a ban in place, that it's not just, okay, do whatever, that this is an important issue that they need to be aware of and thoughtful about when it comes to what their attention diet is and that we as the adults set healthy boundaries and guidelines for our kids.

And sometimes they chafe at that. And then in the long run, they appreciate it. And setting those kinds of boundaries is what creates culture. It's what creates, I think, healthy people. And the lack of boundaries around cell phones is, mean, Haidt's book says it's really obviously devastating to our kids, to our culture, to our communities.

A recent Stanford study said the number one skill that high school kids need right now is to learn to be in-distractable. They have all these distractions coming at them all day long and it's nowhere near what it was like when we were in high school. And to have that device that's going off constantly, there is no way they can fully engage all of their energy into what they're supposed to be doing in a Socratic seminar, a group project, et cetera. And so this multitasking concept doesn't work. Being able to focus on one skill or concept at a time, being in-distractable is really the big skill that this generation is needing to learn.

**Greg:** Let's go on the assumption that even though we restricted phones in the school, kids are using them outside of school. And there's bullying, there's social media, there's all the negatives, and there's positives. And we know that social media can be a real effective tool for civic engagement and getting kids motivated to participate in community service. There's some good things about it. But if we go with the assumption that technology has fragmented our thinking, that the constant connectivity and interruptions taking away our attention, that it's having an impact on our minds. And some of this is occurring outside of school. How do we in school or in the education system help address that? How do we help students develop

sustained focus? How do you overcome the negative ramifications of what's going on outside the classroom?

**John:** I'm curious to hear what Shane has to say about this, but I mean, it's certainly a challenge. So I think there's a couple of possibilities. I think banning cell phones is a great start. And then just having space for that kind of work, those kind of sustained periods of focus, that there's a lot of different ways you could construct that in any given school. I think there's also maybe some value in more powerful experiences than what you can achieve in the normal school day.

I know Animas has Osprey Block. My wife Lori Fisher teaches at Animas and they took kids on a river trip down Cataract Canyon. I love taking my kids on river trips because of the way it gets us away from technology and it's so completely immersive. Kids come back from river trips just minds blown about what the power of not having any technology around for days at a time can do. So do I. When I come back from a river trip, I want to pick up my phone less. And so I think that there's the day to day kind of things that can work, but I really think that having kind of a really high impact experience coupled with those day-to-day experiences is important because otherwise I think it's really easy just for it to kind of get lost in the wash and students to never really see the deep changes that can happen in a world without all that technology.

**Greg:** Great answer, John. How about you, Shane?

**Shane:** I think the model at Mountain and the model at Animas is about going deeper. And you can only go deeper when you're focused and you have that human element where you're working in group projects and going and doing field work, working with local experts, doing a lot of experiential learning. Ours is called Intercession Week, same as Osprey Block. Those experiences, we're creating, we're working on creating great humans that can collaborate, can really think and design things together. And those are the timeless things that were highlighted and most likely to succeed the documentary years ago that are going to be very difficult to replace with AI or anything else.

A lot of what we're teaching right now because of, you know, I can't be the principal 24 hours a day, but from 8 to 3.30, you're mine. And we're going to teach you intellectual endurance. Being able to sit and write. Being able to be in a real productive group conversation and collaborate with a group, those things we're going to teach. And there is a shorter and shorter and shorter attention span with the kids is the longer I do this and as a profession. But I think we're turning the corner right now. I really do. I think there was a little bit of an eye-opening experience with COVID and remote learning. And there was this hunger to get back with their friends and collaboration and doing these exhibitions and intercessions and all these things. That's what they missed.

**Michael:** I want to ask this question. some ways, it's kind of the ultimate question on today's show. And this is for both of you. Maybe we'll start with John. If you had to design the ideal digital learning environment for adolescents, what would it include and what would it exclude?

**John:** I think of what I would want for my own kids. And that's where I go to. I would want full no tech days for my kids. And this is maybe more radical, I think, than I think a lot of schools are even at right now. But when I really think about the ideal situation, I would love full days with just books, and paper, no technology, than enhanced with days where tech is part of the daily instruction. I think that having sustained time to read, to think, to work without any technology at all is important. And then you've heard all the different uses that I'm finding for AI to support students as well. So I do believe all that can be useful. But yeah, I think full NoTech days, maybe three days a week.

**Michael:** All right, Shane, what about you? What would be the ideal digital learning environment? What would it include and what would it exclude?

**Shane:** I think the framework on top of that, of the filter, would be a purpose learning framework where you're really trying to engage not only their head, but their hands and their heart. And using technology appropriately, obviously in my situation, not having cell phones present in the educational environment is really important. One-to-one laptop, I think is really important. I think there's that equity piece where the school must provide those to all students and they all have access. But having that balance where you're incorporating the Socratic seminars and the field work and the experiential learning and then the hand piece, you need to be able to make products and be able to exhibit those publicly.

The ideal environment in the end is really going to have those performance-based assessments built in with exhibitions and presentations of learning. I think those move the needle faster than anything in terms of developing and accelerating ownership and agency. So I think you've got to use technology as a tool when appropriate, have a balance, but maintain that framework of head, heart, and hand and performance-based assessments.

**Greg:** Given how addictive technology is, how do you prepare kids to self-regulate? How do you get them to take responsibility and ownership of the issue themselves?

**John:** I think that that should be a specific learning objective and that students need to be actively critically engaged with that question as part of their educational experiences. Students need to be able to answer that question for themselves because in the end it's going to be their choices that determine whether they get addicted to technology or not and whether they start to develop that metacognition of, I'm you know I'm on social media a lot and it's kind of making me feel bad. Can I get away from this right now?

I think, in the end, it's really students who have to live in this world with all this crazy technology, and to equip them is about engaging them critically in the question.

**Greg:** Shane, how about you?

**Shane:** It's tough. You know, the apps are all designed to create this addictive pull and they know exactly how the teenage brain works and it's working in negative, negative ways.

I think providing these experiences like we talked about with project-based learning and collaboration and field work and going out into the world and experiencing it in amazing ways. They're learning that this is something they can live without for a few minutes or a few hours. What I've seen in the 13 years where they can't have their phones during the school day is the kids are the ones appreciating it the most. It's like a dead period. They don't have to worry about responding and that whole thing that all their other friends at the other schools are just trying to ping them all day long and they can just escape and get away from all of that. I think they're desperately hungry for that and they want it. They want some time just to be kids. We should create schools where kids can be kids a little bit longer.

I think it's modeling it. We've done quite a bit of parent education as well. I've shown a few documentaries in the evening, invite all the parents in and I have mental health experts from the community speak to them about, you know, just common sense parenting, having dinner together with no phones at the dinner table, not letting kids take their phones into their bedroom, the basic, basic things that parents are like, wow, I didn't even know that that should be something we should be doing. It would be really helpful to the development of our kids.

**Greg:** I think it'd be really helpful to have some of those types of recommendations, guidelines that could be community-wide. It's something that we as a community, maybe through partnerships of schools and families and community organizations, where we're saying, look, we want to address this issue. We see this as being something that's having a negative impact on our kids. And let's all work together on this. I mean, do you see something like that being feasible? If so, how would we go about doing that?

**Shane:** We've put together one-pagers with just those basic recommendations for parenting 101 with kids through a digital age. I think our parents are really thankful to have that. I think the other thing that's happened with our ban is we're providing cover for parents because there's like this peer pressure. Well, Joey got one in seventh grade, so I'm going to get my kid one in sixth grade. And now we got kids in first grade.

And parents are being pressured to get a phone. It's like the snowballing effect. But now there are movements, wait till 8th, wait till high school. And parents really appreciate that. If the school can do this and you don't need it at school, then maybe we'll wait till high school before you get a phone. And we feel pretty good about that.

**John:** My kids are eight and ten and they can tell you why they're not allowed to have any technology in their rooms, why all our technology happens in a public space. They can tell you why they have limitations on screen time and I think, you know, Haidt's Book, efforts like Shane's done at Mountain, podcasts like this, I think that it's starting to catch on. Cell phones are kind of like cigarettes and kids need to understand also just the negative impacts of cell phones.

My daughter and I, this is a quick side note. We were just watching Megan, which is maybe a little old for a 10 year old, but my daughter's up for it. We had a lot of fun. And the little girl in that movie goes to her aunt after her parents die and her aunt just lets her have screen time whenever she wants. And I asked my daughter, what's that mean? That her aunt lets her have screen time whenever she wants. And my daughter says, it means she doesn't care about her. And that's the signal they're sending in the movie. And my daughter knows it and she sees it.

And so she does push back. She does want a phone. She does see her friends getting phones. And she also knows the story that the reason she's not going to get one until she's 16 is because we care about her. And we've been setting her up since she's been pretty little for these boundaries. So that's another thing too. I think parents can talk to their kids when they're young about these issues. So that by the time they get to middle school, they get to high school and those pressures start coming that the kids already come kind of pre-packaged without counter narrative even though they are going to push back. And I think this kind of awareness is growing.

**Michael:** What's one thing every educator should know about technology and learning?

**Shane:** I think it's a tool and understand how to use it. I think it's a very effective AI in particular for teachers and administrators. And it can save you a ton of time. It's not going to create a final product, but it's going to really help you with ideation, brainstorming, and just maybe getting your thoughts in order or researching. I like flipping it and where I can feed it certain information. So Notebook LM is my favorite one. I'm a fan of Perplexity. I think there are certain AI tools that are very, very powerful that I gravitate towards.

So there are some fantastic tools. know, we are a Google Workspace organization, all of our teachers have Gemini. It's coincidentally, Gemini is blocked for kids 13 and younger for a



reason. You know, the image creator and such, you can imagine what that could do. And then 17 and under, they have to pass a digital driver's license, they call it, to use Gemini.

I think we have to just keep that balance, but very effective at helping teachers and students too, but in certain ways. in terms of enhancing learning and taking things to the next level, just knowing how to use it, use it appropriately and wisely.

**Michael:** John, what about you? What's one thing every educator should know about technology and learning?

**John:** I'm going to tweak that question a little bit. I have the luxury of being a college professor, so I'm not with students all day long, like K-12 faculty are. So I have the time to do a project where I can basically make learning about AI my full-time hobby. I mountain bike and I learn about AI and I have time to do those things. And I've learned a lot because I have the time. I have support from my institution. San Juan College actually pays me because of the distinguished teaching chair to do that work, to take a leadership position at the college. I know our K-12 instructors want to understand this technology and know more about this technology, and they often are just too busy. And so I would direct my feedback to administrators to make sure that you provide the time, the incentives, the support, the training for faculty to be able to learn this technology. This technology is not just plug it in and scroll TikTok AI. There's so many different tools.

Some come pretty fast. I also love Notebook LM, Shane, and I love to put academic articles into it and then I listen to the academic article and podcast version later. That tool works really, really quickly. But the nuances of how to prompt engineer something in chat GBT to make it actually useful for students takes time, takes training. There's a lot of subtlety in there. I know educators want the time and the training to find that subtlety and it's just a matter of helping them get that.

**Michael:** Okay, final question. What's one thing parents should understand about raising kids in a digital world? Shane, we'll go with you first.

**Shane:** I think parents really need to get educated on the ramifications of what they're handing their kids and monitoring where they're using the technology. If it's in their bedroom alone, if it's out to dinner at a restaurant and everyone's just on their cell phones, I mean, we've all seen that. So I think parents really need to step up right now. A lot are, like John and others. I think they're researching what's out there and how it's affecting kids and excessive screen time. Having that balance of go outside and play. And there's a big movement right now with the challenges that teachers send kids home with to go and play and do basically the things that we did growing up. And so monitoring that use and I guess the time, how much time they're using it. And take your kids outside, take them on trips, take them to do amazing things. The world's an amazing place and you can't replicate those experiences on a phone.

**Michael:** John, what about you?

**John:** I love what Shane said. Shane, you mentioned earlier not having cell phones in their rooms. I think sleep is huge. And a lot of the studies have just shown that when kids have a phone in their room all night, they just spend all night awake and anxious, just worried about what that next ping is. There's so much social pressure on us that this idea of just getting away from it is so important.

**Michael:** Well, John Fisher and Shane Voss, thank you both for your time. It's been a pleasure having you on the show.

**Greg:** Thank you guys.

**Shane:** Thanks for having us, thank you.

**John:** Thank you.

**Michael:** That conversation with John and Shane really got me thinking about how technology is changing everything, including the way young people engage with their communities and the world around them. There's this fascinating research that just came out looking at how social media affects political participation among young people. And what's really interesting is that studies across multiple countries are showing that social media can have this positive effect on civic engagement. It helps young people express their political views and connect with others who share their concerns.

But here's the catch, and this is where it gets complicated. While social media increases awareness of social issues, which is great, there's still this gap between being aware and actually taking action. A lot of young people are consuming information and sharing posts, but they're not necessarily feeling equipped to create real change in their communities. And that makes me wonder, in our digital age, how do we help students move from just scrolling and sharing to actually rolling up their sleeves and making a difference. How do we bridge that gap between online engagement and real world impact?

**Greg:** Well, Michael, that's exactly what we're going to tackle next time when we meet with two people who know a lot about this. Barbara McLachlin brings a unique perspective. She was a teacher at Durango High School for years before becoming a Colorado state representative. So she's seen civic engagement from both the classroom and the statehouse. And Dr. Paul DeBell, a professor of political science at Fort Lewis College, who's doing some really innovative work on political psychology and civic engagement and is the leader of the Fort Lewis College Political Engagement Project.

"Next time on Help Me Help You, Civic Engagement and Community Service", we'll explore how schools can help cultivate the next generation of engaged citizens who don't just care about issues, but know how to do something about them.

**Michael:** See you then!