📖 My chat (+transcript) with Mentava founder Niels Hoven on accelerating kids' education

Faster, Please! — The Podcast #58

James Pethokoukis Sep 5

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skills. We have varsity leagues, we have junior varsity leagues. We make sure that kids are challenged at the appropriate level for their current level abilities. And for some reason, when it comes to academics, we throw all of that out the window.

Our progress as a society depends a lot on the brilliant ideas of our greatest thinkers. To improve our way of life, we should be promoting our best and brightest to the highest heights of their potential. Instead, we seem to be stemming the flow of great minds at the source: in our public schools. With a one-size-fits-all, equality-of-outcome model, we rob our kids, and our society, of their potential.

Today on *Faster, Please — The Podcast*, I talk with Niels Hoven, founder and CEO of Mentava, an educational software company. Hoven's goal: to help kids learn at their own pace, whether that includes additional support, or simply the resources to excel beyond expectations.

Hoven is the father of four, former product manager at Cloudflare, and was VP of product development at Pocket Gems.

In This Episode

- **Investing in our future (20:05)**

Below is a lightly edited transcript of our conversation

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Pethokoukis: Niels, welcome to the podcast.

Hoven: Thank you so much. I appreciate you having me here.

Treating academics like athletics (1:35)

You argue that the current American education system is fundamentally flawed.

I do think it has some issues.

How does closing achievement gaps hurt our education system? How does it hold students back?

So obviously my problem is not with closing achievement gaps, my problem is what happens when you set up policies with that as the only goal. I think what we've seen is that the goal of today's modern education policy is closing the gaps between high achievers and low achievers, which is, of course, wonderful, but the way that has actually manifested in schools is by slowing down high achievers and not giving them the opportunity to achieve their potential. In San Francisco, you're literally not allowed to teach material above grade level, which I think is crazy.

Most school systems have gifted programs. Doesn't that meet your concern?

So those gifted programs, I think they don't go far enough to support the learning needs of students who are really capable of achieving dramatically more, and, in a lot of places they're very, very hard to get into. So in our school district right now, in order to qualify for the gifted program, you have to take a series of tests and you basically have to score 99th percentile on all of those tests. All of those tests are basically grade-level tests, so they're not really teaching seeing how far above grade level you are, so it's really, "Are you really, really good at taking the tests, so well that three times in a row you can score 99th percentile on grade level stuff?" That's not really getting the kids who need their learning needs supported by these special programs, and these programs really only operate a single grade above grade level. What about the kids who could be doing calculus in middle school, or want to be moving much faster than that: Two years of math a year, every single year — we aren't supporting them.

You've proposed treating academics more like sports. What does that look like in practice and how might that change how we approach education and how we think about education more broadly?

When it comes to sports, everybody is basically aligned that the goal here is helping every kid reach their potential. We celebrate talent, we give athletes the resources and personalized support they each need to develop their skills. We have varsity leagues, we have junior varsity leagues. We make sure that kids are challenged at the appropriate level for their current level abilities.

And for some reason, when it comes to academics, we throw all of that out the window. We just say, "Okay, everybody must progress at the same speed, learn the same thing at the same time." To me that's like saying, "Okay LeBron, you are not allowed to dunk until everybody else can dunk also." And so I want to see us treat academics more like sports, where we

encourage students to pursue their interests, to develop their talents to the fullest potential, and respect the diversity of kids' ability and motivations.

To what do you attribute the staying power of this — I don't know if it's a one-size-fits-all system, but of a system that, in many key ways, isn't different than it was a hundred years ago?

It is a government-sponsored monopoly, so I guess that would be my answer. How did the taxi cab medallion system last so long, even though it was dramatically underserving everybody who wanted to take a taxi? There's no competition.

What does that more sports-like environment look like? It sounds like there'd be more freedom, there'd be less regimentation. What does that world look like?

What I'm really pushing for is I would like to see students receiving instruction appropriate for their current level. I talk a lot about high-achieving students, but this is also true for struggling students. Right now we have a very one-size-fits-all model of education, and that means students who are struggling and need extra attention to get caught up aren't given the opportunity that they need to perhaps move at a slower pace or get extra support, and kids who want to be moving faster and maybe learning two years of math a year, every single year, so that they can be doing college-level math in middle school, they're also not getting that support. We managed to do that in sports, we have lots of different leagues so that kids can find the level of competition that is appropriate for them, but for some reason, when it comes to academics, we refuse to allow that amount of differentiation.

School as childcare and instruction (5:44)

You advocate reducing instruction time to two hours a day. One, is that enough? And two, what are the kids doing for the other . . . are they getting into mischief? What are they doing for the rest of the day if they're not studying?

I think we've really conflated the role of school, and I think an important question to ask is: Is school as we provide it now, is it childcare or is it academics? And I think it is both. An interesting fact about school is, despite all of the problems that we all understand our schools have, schools have like an 80 percent approval rating from parents, and that's because the job that schools do for most parents is actually childcare. It is free childcare for while the parents are at work, it is finding a place where your children are entertained and loved, and that is super important.

But somehow we have also layered this layer of academic theater on top of that childcare instead of saying, "Okay, these kids can play in the woods for eight hours a day, or they can play dodgeball or grow their social-emotional skills and build their friendships with a friend." We had to say, "No, they have to be learning something – but not too fast at this very, very slow pace." And if you look at things like homeschoolers, you see most homeschoolers do two hours of academics a day, and they have the same outcomes as kids who are going to public schools, so we really don't need that much more time doing academics as long as that time is being spent efficiently.

Is this new world possible within a mostly public school system as it exists today? Can you do this, or are you talking about private school, homeschooling, but does this have anything to do with the public school system, which seems to me fairly resilient? Certainly, I think the changes of the sort of magnitude you're talking about.

I like the public school system. I went to public school, I had a really positive

experience in public school. My own kids go to public school. And I think the difference is that when I was in public school, people were much more accepting of the idea of kids who wanted to move at their own pace. And so Mentava, certainly we're happy to support kids who are homeschoolers, who are in private school, but the real vision is to allow kids to be part of, essentially, their local public school community, go to school with friends from the neighborhood, but still have the opportunity to progress at their own pace

The role of parents (8:04)

Tell me a little bit about your personal educational experience and how that shaped your views and how it eventually led to your company.

Education has always been very important to my family. My dad taught me to read early, when I arrived at kindergarten, I could already read, I was roughly a year ahead in math. And so he negotiated with my school to just let me, during math class, just for an hour a day, could I just go to the next grade up and sit in on their math class and then come back to my own class for the rest of the day. And we did that, and that worked great until third grade, because my school only went up to third grade, so there wasn't a class for me. So at that point, I just started doing independent study. Just during math class, for an hour a day, I would go to the back of the classroom, I would study out of a math book, and then at the end of that hour I would come back and rejoin my friends for the rest of the day.

And I did that for the next four years, and basically, thanks to that accelerated support, I ended up taking calculus in eighth grade. There are kids who can be moving that fast if you just kind of get out of their way. My own son — he goes to a public school — we also got permission for him to do independent study last year, and now in fourth grade he'll probably be ready

to start pre-algebra.

This is doable now. This was doable when I was a kid with textbooks, this is doable now with off-the-shelf software, but it's harder than it needs to be. And so our vision is: We can make this easier. I think a lot of kids could have done what I did, but they weren't given the opportunity. We want to make sure that more kids have this opportunity to have their learning needs supported.

Do you think parents underestimate what their kids are capable of doing?

Parents have no idea what their kids are capable of doing, especially parents of high-achieving kids. We've seen this over and over again with the families who are entering in Mentava's learn-to-read software now. We target our software at kids as young as two, but often age three and four, we're trying to teach them to read, trying to get them to about a second grade reading level in maybe six to 12 months. We just had a three-year-old complete our entire curriculum, which gets us close to a second grade reading level, in about six months. So it is doable, it can move fast, and we have parents who say, "I had no idea that my kid was capable of doing this at this point!"

Mentava's mission (10:04)

So walk me through what your company does, the service it provides, how it all works.

The long-term vision for our company is to support the learning needs of kids who are not being supported in school. If you have a child who wants to learn two years of math in a year, the real gating factor of that is, a lot of times it's teacher availability, or it's school policy that says there's no one available to give them that instruction. But imagine that they had the

opportunity to just go open a math book.

It's a resource issue. We'd love to do it, but we don't have the resources.

We don't have the resources. Sometimes that's true, sometimes that's not true, sometimes it's policy, but whatever. But they could go get a math book, they could just study that book and go as fast as they wanted — but that's boring. Not every kid is going to have that motivation. And so, to some extent, we're not really solving for curriculum, we are solving for motivation. We want to build software that can deliver that same curriculum — we know how to teach math, we know how to teach reading — deliver it in a more sort of fun, entertaining, motivating way, and allow kids to essentially continue to progress at their own pace without being gate-kept by the availability of teachers to essentially unlock that knowledge for them. And so we are starting at a very young age by teaching kids to read with software.

What I really want to teach is math. I want to get kids to learn math as fast as possible, but in order for kids to be able to teach themselves math, they have to be able to read, and so that is our first piece of software: learn-to-read software for preschoolers.

And obviously preschoolers, these are young kids, so is your expectation that software will be done at home? Are there schools trying to incorporate in some way? How's that working?

We've started talking to schools about pilots, but I think, right now, we get a lot of attention from parents. Incentives are just better aligned that way. Schools right now are not particularly concerned with, "Are we supporting our kids achieving their fullest potential or are we ensuring our kids can learn as fast as possible?" But parents really care about that. And so right now we have a lot of customers who are basically parents at home who realize, "Oh,

my three- or four-year-old is ready to start reading, what can I do to best support them now?"

How long has the company been in business?

We kind of accidentally launched about six months ago.

Was this a pandemic-related idea?

This was. I have four kids. I had three kids during the pandemic and the fourth one arrived during the pandemic. They were at home, doing school at home, and I also had a job at the time, so did my wife, we had two working parents trying to take care of three kids at home, we were trying to figure out how to help them learn, and really the only way to make that work was to give them the skills that they needed to teach themselves. And at that time, my kids were five and three. And so how can I get my five-year-old teaching themselves math? How do I get my three-year-old teaching themselves to read? And the solution to that is software. We know the curriculum, we know if you want to teach reading, it's phonics, but how do you get the kid to sit down and memorize the 44 sounds in the English language? Well, turns out that software and games are really, really good at solving motivation, so we just needed to package that all together and that was how Mentava was started.

So during this exact period that you've thought of this idea, you're putting together a company, putting together the software, we have sort of a new stage in software happening with chatbots and large language models. Are those technologies that compliment what you're doing? Are you going to have to do something different to use those technologies? How's that going to work out for you?

It's very complimentary. So we're not using AI right now, but we see it

coming. There is kind of this perfect storm of timing right now where, I think because of Covid, parents started to realize that, "Oh, my kid is not learning as much in school as I thought. This is what they're doing in school?" We had all that visibility when our kids were doing homeschool in front of screens at home.

Technology has gotten to a point where we can give screens to every kid, and iPads, and other tablets. Touchscreens make learning much more accessible. We're seeing the effectiveness of some learning software — a lot of learning software is really, really bad, but some of it is good, and people are seeing that. And then, at the same time, like you see AI coming out and getting people very excited about the potential of software to affect education.

It's funny, when we were raising money, the idea that software could be a teacher was a very contrarian perspective. Everybody said, "How could software possibly be a teacher? You're going to need a human there." And then about 12 months later, AI came out, people said, "Oh, of course you're going to have software teachers. We've always believed that."

But my take on AI is that the power of AI is really in its adaptability, and you actually don't need that much adaptation for teaching reading or teaching math. You memorized the 26 letters, the 44 sounds in the English language, you learn addition, and then you learn subtraction, then you learn multiplication, then you learn division. It's pretty linear. It's pretty sequential. And so my belief is that there's actually this core learning pathway that you can really, really optimize, and we should focus on that. And it's fairly sequential, and it's fairly deterministic. And then the power of AI is to catch the kids who fall off of that and get confused and ask, "Okay, what are you confused about? I see you're confused about this thing. Let me give you some custom instruction and then get you back on that main pathway."

Reframing the public school (15:20)

In an ideal world — and let's just stick with, I think it's reasonable to think that, for the time being, most kids are going to be educated by public schools. That's a lot of kids, a magnitude difference in how many kids are in private school or are homeschooled. What should that public school day look like, ideally, given what you've learned going through this process?

The biggest challenge for public school is that there's such a diversity of student needs there. Public schools are simultaneously academics, but they're also childcare, and they're also a social support network. They're a safety net for a lot of kids, and they're trying to provide all those services to all these different kids by giving them all the exact same thing. To me that makes no sense, and what I would really love to see in our public schools is just more differentiation, more acceptance of diversity of needs, diversity of motivations, diversity of abilities, and saying, "Okay, these children need this particular service from our public schools. Let's make sure that they're in a place where they can get those services. But we have these other kids who want to learn two years of math every year. They can do that in two hours a day, and then they want to spend the rest of the day playing in the forest." That would be amazing.

Should that actual classroom time look markedly different? I'm sure that if I went into most classrooms — I had kids, one currently in high school and ones who were in high school not that long ago — that those classrooms, blackboards, teachers, lecturing: That's the classroom experience. That's in 2024, that was the classroom experience in 1924. Should that classroom experience look fundamentally different?

I think that's an interesting question. I think it's going to look different for

different kids. I think there is a sense that some of the rigor I would say of the old days has been lost, and I think that there's good and bad to that. I think a lot of that is a result of conflating childcare with academics. You can't do rigorous academics for eight hours a day. It's sort of like weightlifting; you can't do squats for eight hours a day, but you can do them very effectively for half an hour. But if you want to *pretend* that you're exercising for eight hours a day, then you, by definition, have to remove a lot of that rigor. So I would like to get rid of the academic theater and be very clear about, "Okay, *this* time is play time, this is childcare time, and this time is academic time, and we're really going to buckle down and focus here."

The San Francisco algebra ban (17:50)

A few years back, there was a ban on teaching middle school algebra in San Francisco. Can you give me some background on that?

So this was passed about 10 years ago. The way it used to work is that most kids took algebra in eighth grade. If you were ready earlier, you could take algebra in seventh grade, but essentially in San Francisco, because some kids were not prepared to take algebra in eighth grade, they said across the board, all kids must take algebra in ninth grade. So even the kids who used to take it in seventh grade, the kids who used to take it in eighth grade, "Sorry, we're not doing it in middle school anymore. You all have to take it in ninth grade."

Usually these sorts of educational decisions, they're just lost in the noise, parents don't have time to focus on the nitty and gritty of curriculum, but this was a big problem for parents because this meant that you could not get through calculus in high school without essentially taking summer school or getting private tutoring. And for a lot of competitive colleges, you need to be in calculus, have taken calculus, in high school. And so parents had a real

problem with this particular curriculum change.

The irony of all of this is that this was enacted with the hope of increasing equity, of driving more equal outcomes, and it had the opposite effect because now it's just the parents with the resources who are able to go out and do summer school, and private tutors, and then get their kids the math support that they needed. So this happened a decade ago, and it has been a battle for 10 years to get algebra back into middle schools in San Francisco, and it actually went the other way: California statewide nearly got rid of algebra in their statewide middle school curriculum because of the quote-unquote "success of San Francisco," which is basically, if you look into it, it's just San Francisco cooking the books, literally lying about their outcomes.

And so finally, this past year, parents essentially had enough and they put it on the ballot and said, "We're going to take a vote about, should middle schoolers be allowed to learn algebra." It's funny because a lot of times people think that this cuts along party lines: Conservatives versus Democrats, red versus blue, but even in San Francisco, the most progressive city in the United States, 80 percent of families were like, "Yes, we should support all kids learn these. Yes, if a kid is ready to take algebra in middle school, we should allow them to do that."

Investing in our future (20:05)

I'll tell you the one thing I kept thinking of as I was learning more about your company and your outlook was it seems to me like it'd be really important, as a country, that every kid can reach their potential, but especially the very smartest kids, that we get everything out of them that we can, right? That's pretty important. These are people who are going to be designing the next stage of AI, they're going to be designing the new computer chips, they're going to be in

biotechnology. If we can get more out of those kids, there's a huge multiplier there.

I believe that very deeply. I believe leaders are important. I believe in the power of single individuals to create huge amounts of change, but not everybody agrees with that. I was at a school the other day, and a bench outside the school literally has carved into it —a bench that every student sees as they go into the school — it says, "Strong people do not need strong leaders." And I fundamentally disagree with that. I think we need strong people and we also need strong leaders, and the way we get both of those is ensuring that every student has the opportunity to have their learning needs supported and have the opportunity to achieve their potential.

What's the direction of the company? Where are you going to be in five years? What's the dream?

Right now, we are in the process of officially launching our learn-to-read app, targeted at preschoolers, and then what I really want to do is start transitioning into math. So once we have taught kids to read, we have essentially unlocked their ability to teach themselves. And so our goal is to keep up with this earliest cohort of kids who are learning to read and support them as they continue through their K–12 career. If they want to learn two years of math a year, then I would love to build two years of math curriculum each year so that they continue using Mentava to support their K–12 experience, and then they discovered that, I don't know, they're done with math in middle school, and then they get to figure out what's next after that. Do I go start a company? Do I do internships? Do I go learn marine biology? I don't know.

What about computer science? Does that play a role here?

When I say math, I would say specifically math and computer science are

what I'm most passionate about. I think of it almost as vocational school. Those are the skills that we can teach that directly contribute to, okay, this person is able to create more value in the world because they know these two fundamental skills now.