

## #162 — Mastery Learning, with Jon Bergmann

**Time:** 49:34

**Owner:** AVID Open Access

### SUMMARY KEYWORDS

students, mastery, kids, learning, teach, work, teacher, classroom, book, winston, learn, remediation, content, class, today, year, test, space, idea, love

### SPEAKERS

Jon (67%), Winston (13%), Rena (10%), Paul (9%), Transition (1%)

#### **Jon Bergmann 0:00**

Some students need something else to help them. I need to know what I want them to know first before I backtrack and say how do I design my lessons so I can get them to the final point? One of the key things to making mastery learning work is that you have to be really hyper-organized.

#### **Paul Beckermann 0:19**

The topic for today's podcast is Mastery Learning, with John Bergmann. Unpacking Education is brought to you by avid.org. AVID believes in seeing the potential of every student. To learn more about AVID visit their website at [avid.org](http://avid.org).

#### **Rena Clark 0:38**

Welcome to Unpacking Education, the podcast where we explore current issues and best practices in education. I'm Rena Clark.

#### **Paul Beckermann 0:49**

I'm Paul Beckermann.

#### **Winston Benjamin 0:50**

And I'm Winston Benjamin. We are educators.

#### **Paul Beckermann 0:54**

And we're here to share insights and actionable strategies.

#### **Transition Music 0:58**

Education is our passport to the future.

#### **Paul Beckermann 1:04**

Our quote for today is actually from the introduction to our guest's new book, The Mastery Learning Handbook. In the intro, our guest John Bergmann is recalling a time when he and

Aaron SAMMS first began recording in-class videos, or in-class presentations to catch students up after they'd missed class. And John writes how this led the two of them to other revelations. He says, "We soon realized that the best use of our face-to-face class time was not standing in front of students lecturing them. It was getting students actively engaged in learning." So Rena, you want to kick us off with something that you're thinking about with that?

**Rena Clark 1:40**

Yes, I love this. And actually, I've even been coaching into this idea. But how do we really maximize that face-to-face time, especially when we're able to maximize that small group setting. So that face-to-face time I think about really should be used doing things that we can do, we couldn't do another way. So if I can just record a video, and it's direct instruction, I should not be you know, wasting time doing that. So how do we allow time for discussion, investigation, co-creation, group thinking. And this is also really been pushing my team on how do we really shift professional learning into this as well, this whole idea. So I really appreciate you bringing that idea forward, because it's been top of mind lately.

**Paul Beckermann 2:22**

Hey, Winston, how about you?

**Winston Benjamin 2:23**

So as I'm thinking, I'm like, I'm trying to think should I talk about my childhood, or should I talk about my work as an adult, in the context of like culturally-responsive engagement with students, right? As you're doing, thinking about sitting at the top of the classroom, and you're trying to lecture, you do not have access to every culture. So you're going to be missing ways of engaging students in that learning. So, by shifting the context to where you're now allowing for students to share and talk with each other, they're gaining and providing each other cross-cultural knowledge. And in that way's we're learning really engages and happens, right? It's not when you miss a cultural context, or you provide students with a lack of, as Paul calls it, the founts of knowledge, right? By providing and turning the classroom, you allow students to really engage in that self-taught, self-learning, and internalizing of knowledge. Right? So, I think that's an important aspect of this quote. It's really trying to provide the leverage points for students if a teacher does not have those cultural markers.

**Paul Beckermann 3:27**

For sure. Thanks, thanks, Winston. And, you know, it's kind of appropriate. We're using a John Bergmann quote to launch into our conversation with John Bergmann. Welcome, John.

**Jon Bergmann 3:37**

Thanks for having me. It's great to be with you guys.

**Paul Beckermann 3:40**

You bet. So here's my formal introduction of you. And then I'll let you tell us a little bit about yourself, as well, kind of off that. John Bergmann is our guest today. He's one of the pioneers of the flipped classroom movement. And he has coordinated and guided flipped learning programs

all around the globe. He's also the author of 10 books, including the one that we're going to talk about today, *The Mastery Learning Handbook*, which is his new book. And John has been an educator since 1986. He's currently teaching science in the Houston, Texas, area. So John, we're happy to have you.

**Jon Bergmann 4:11**

It's great to be with you guys. And yeah, I was, you know, I spent a number of years being the guru traveling all over the world, which was great. And it did great things. I felt like it made a big impact on the world. But I really felt the need to be back in the classroom. And so the last four years, in 2019, I started back teaching after like a seven to eight year hiatus, doing the World Tour thing. And it's been so good to be in the classroom and also timing-wise, it was ideal. I was able to be in the classroom in the middle of COVID and to really understand where teachers are at and what they were facing because I was facing it right along everybody else.

**Paul Beckermann 4:54**

Yeah, you picked quite the time to hop back into the ring didn't you? No, that's great. So we're just gonna kick it off with a little bit of an introduction of mastery learning. How would you define mastery learning? Or how do you think about that, John?

**Jon Bergmann 5:09**

So it's a cyclic process where students move through content, or the curriculum, however, you want to say it, at a flexible pace. So there's a cycle. In the book I discuss the cycle starts with clear objectives. And then it's a backward design process where then you, you know, after you've decided what did they need to know, then you jump into: how are you going to know that they know? So sort of an assessment planning and eventually to lesson planning, then there's remediation, because of course, the big idea of mastery learning is that if you don't pass the test, so to speak, or whatever it is that you're going to use this sort of the exit assessment, then if they don't pass it, they get to take it over again. So and then there's remediation, and then they repeat this cycle. So, for example, today, my physics students took a test and 80% of them passed on the first attempt, but 20% did not. And so they are going to have to retake the assessment after getting some remediation. I already did a fair amount of the remediation with them today. And then during the next class, or whenever, they're going to take it again. And even, honestly, some kids who pass the assessment, and they would, they are striving for more excellence, and they're going to actually take it again on their own time, because they want to even demonstrate even greater mastery. And so they even got some remediation themselves on what they struggle with.

**Paul Beckermann 6:34**

At one point in your book, you talk about the fact that remediation can't just be reteaching the same way that you taught them the first time, right?

**Jon Bergmann 6:42**

Correct. Yeah, it's important that, this was something that I did wrong. In many ways, this book is all the things I did wrong, and how to fix it. And also, what I did is I interviewed people who

are doing mastery learning all over the world, including people like Thomas Guskey, who probably never did anything wrong, but he's amazing. But researchers who were really smart, who had thought through a lot of these kinds of things ahead of time. So I learned by, I kept saying, Well, why don't you learn the first time when I first was doing this, and then I realized I needed to come up with a different strategy. So their first initial foray into the content often in my classes is a short video that they would watch. But some students need something else to help them. What I've really found is almost the best sort of remediation strategy is just a small group working with me, I mean, either individually or a small group. I usually try to find a group of students who are struggling with the same thing, and we make an instant group and we're going to work together to solve physics or chemistry problems or theology, or whatever I'm teaching, and so that they can figure out what they're, I can sort of, in that sort of obsession, figure out what's their biggest struggle, and then figure out how to remediate. I've taught these things for a long time and I feel like I know what the common struggles are, so I can identify those, and then I can develop a strategy, depending on the students.

**Rena Clark 8:07**

And you've kind of mentioned video a few times. And at one point, in your book you write "when mastery learning is done in conjunction with flipped learning, it's much more successful." So can you just talk a little bit more about that and how flipped learning is connected to the mastery learning?

**Jon Bergmann 8:22**

So one issue with mastery learning is that you have to time shift the instruction, like the direct instruction. So, a little history of mastery learning... In the 1980s, and even saw a part of the '70s, Benjamin Bloom was really doing a lot of work with mastery learning. But the problem in 1970s and 1980s is, if there's any direct instruction in your curriculum, when do you do it? Because you know, one student is on, you know, section four, and they're on section two. But if I can make short videos that can be asynchronously watched when the kids are ready, then they can, that's, that's where the flipped piece comes in. Now even the evolution of Aaron Sams and I, when we first wrote our first book, Flip Your Classroom, we talked about, like the second half of the book, flipped mastery, we called it. And Flipped allowed us to time shift that direct-instruction piece so that I could multiply myself all the time.

**Winston Benjamin 9:23**

You're saying something that I'm that I'm really jiving with is this idea of constant change. You kind of outlined in your book, mastery learning cycle. Right? So I just have a quick question in relation to backwards design. Right? Why is backwards design so important in mastery learning, and this mastery learning cycle, right? Why are they connected and why are they important together?

**Jon Bergmann 9:49**

I'm not sure that they have to be, I guess, but I have found that it's the best way to plan. I don't care how you teach. I think backwards design is the best way. And I came about it, I talked about this the wrong way. When I first did mastery learning, I planned normally. I said, all right,

here's the lesson. What am I going to assess and all this. But it just doesn't work. I mean, it, maybe maybe I could say it this way. One of the key things to making mastery learning work is that you have to be really hyper-organized. You have to really be very specific about what you want your students to learn, and how you know that you know, that they've learned. And so it's sort of silly to say, I want to do it in the regular order, if you will. I want to I want them to, I need to know what I want them to know, first, before I backtrack, and say, How do I design my lesson so I can get them to the final point? So one thing that you have to be if you're going to do a mastery learning is you have to be very organized and very specific. You can't walk in and just wing it. If you wing it, it's not going to work. You've got to, you know, I give students a packet, if you will, and say "Here are the seven lessons in this unit. And these are the seven key things that you have to learn." And I have to be organized and have those seven things ready, those learning objects ready so that students can move through at a flexible pace, you know. So for example, right now our students, some of our students, our school is well known for its musical play. The musical play is in three weeks from now, I want to say it's sometime in February. I have two of the key actors in my class, and they got a unit ahead, because they want to get ahead. And so I've got this unit ready to go so that they could actually, what they have been doing in the last few weeks is they got ahead, they completed the unit, and they say, Mr. Bergman, can I go to the theater and practice my part? They have already completed the entire unit. I said, of course. So they know they're just using, you know, sort of adult-level, you know, time management skills to say how can I best use my time? And I can get an extra hour in a theater room with Mr. Linhart, the theater director working with us to, you know, on our dances and our music and all the things that you do on a musical theater.

**Paul Beckermann 12:12**

And how incredibly empowering and motivating, right?

**Jon Bergmann 12:15**

Yeah.

**Winston Benjamin 12:16**

I'm hearing a quick thing about the curriculum is that it's not just the mastery cycle for the students to learn. It's also a mastery cycle for the teacher to understand the curriculum enough to bend it. Am I kind of like getting that context with you as well, or...?

**Jon Bergmann 12:33**

You know, Winston, if I were to say a weakness of mastery learning that is sort of in the back of my head, is that if you have a teacher who doesn't really understand the content deeply, because in my class, I'll be working with an advanced student asking me a crazy hard question. And then the next moment, it's a remedial student who's struggling with the concept, and then something in the middle and back and forth. And this, this, this sort of constant ebb and flow of how this happens. If you have somebody who is not a content expert or content shy, or I don't know, the right word I would use, I'm not sure it's going to be as effective. That said, and I've also postulated, is that if you have a newer teacher to this model, they're going to become a content expert a lot faster this way, than any other way. Because if you're just standing up and

doing the lecture, then that's easy. I mean, I can, you know, prepare a lesson out of a textbook or whatever content source you're using. And I can, you know, teach it a certain way. And then, you know, I sit down, and I'm done. And I kind of hope the kids get it. But I'm not sure you understand it as a teacher as deeply as if you're interacting with students over the content, and you're seeing the weaknesses and the strengths. And you know, what kind of common questions they're gonna have, because only a few kids are gonna raise their hand in a lecture. But if you're in, you know, constantly, you know, one-on-one, one-on-three, one-on-four, with kids, you're going to get to see so many more, you know, permutations of what they struggle with, than you will if you're doing the traditional thing.

**Winston Benjamin 14:09**

I appreciate that deeper question on that. I appreciate that.

**Paul Beckermann 14:13**

You know, that that makes me think about the planning piece of it, because the kids are all over the place as far as, you know, their pacing goes, which is good, because you're accommodating their differences in their pacing. But that leads to kind of a unique lesson planning kind of style. And in your book, you talk about four key parts. You talk about formative assessment tools, independent space learning objects, group space learning objects, and reflection. Can you kind of talk about what you mean by that model?

**Jon Bergmann 14:44**

So, I think the most important thing that I do is I wander around the room and I just check in with kids. So today, my chemistry class, they are finishing up. So I do actually schedule a day for the first attempt at the test. In chemistry, it's tomorrow. And so I was going around today checking in with each kid, doing formative assessment questions. So there was an experiment that they did recently. And I would ask a group, it'd be group of, you know, we'd have a group of like three kids who did the experiment together. And there were some questions that got to a deeper understanding. And I asked them to, how would you respond to this question three? And this, they were supposed to respond, but I wanted to hear them say it, right? I wanted to have a conversation with them. And also in that conversation, I'm differentiating. So I've got students who I know get it much deeper than others. There's, there's, in my mind, there's a level of mastery, you know, I call it book basic level mastery. And I've got Advanced Level Mastery. And I'm, and I'm tailoring the question to the kid who I think can handle whichever level I think is appropriate for that student. And so I am constantly doing formative assessments. I mean, there's some other things in place. I have built in a system, which I call checks. So that took a short quiz. It's like one, maybe two-question quiz, that's a check that they do in the online portal, to see that they can check to see if they can, you know, do this certain type of problem, answer this sort of conceptual question. So that's like on the formative piece, okay. And then in the end, so in the, in the vernacular of flipped learning. So I've borrowed from this, there's two spaces--the independent space and the group space. In an independent space, it's what they can do on their own, and it tends to be lower level--it should be, not just tends to be--it shouldn't be lower-level Bloom's taxonomic levels, knowledge and understanding. And that typically is the content dissemination. And that is highly encouraged, at least in my school, a high performing

school, that my students will do that outside of class time, so that when they're in class, they can do the group activities. So the group space activities, and this is all designed in my my packets. I have these handouts. So that would include experiments, problems, inquiry, all kinds of different things. Other teachers might use more project-based learning. They might do more debates. They might do, there's lots of different ways you could do group space activities. But you would do the group space activities, in my case, since they're kind of moving through these at their own, at their own flexible pace. Then what they're going to have is, they're going to move through the content. They're going to be grouped. So some groups are on lesson seven, and some on six, and some on five, etcetera. And so they're not really all over the board, because I have these hard dates that they have to finish certain things. And then at the end of each class period, I have them reflect. So I just have a shared Google Doc, and they hop in their Google Doc, and it's just got their names in it. And I just change it each day. And then they just type a reflection. So my phone buzzes with five minutes to go, and they hop in the doc, and they reflect on what, actually, I have two questions. Question number one is, what have you learned today about science? And number two, what is the next step in your learning journey? Well, I need to watch this video, or I need to do this at home, or you know it's just so that they're keeping track of and taking ownership of what's my own particular learning journey. So those are the two questions they answer every day.

**Rena Clark 18:22**

Yeah, that's powerful. For them to have that control. I was thinking even as an educator, I could be writing those two questions down for myself at the end of the day, filling that in. So I mostly work with elementary students and support elementary teachers. So I'm just kind of having that lens too, like, what that could look like at that level. And you talked about it a bit like in a bigger sense. But when we get down to it, what might like a typical day look like in your mastery learning classroom? I'm one of your students. I walk in. What does that day look like for me? Or feel like?

**Jon Bergmann 18:54**

I start some routines. First routine is at the beginning of the day, there's a check-in question. So today, in chemistry, it was a certain type of a problem. And so they sat down and the problem's on the board. Sometimes it's in the check-in document, but this is a mathy-type question. so I said, "All right, open up your packet to page number 23. And then I want you to solve this problem. Work in groups. You've got five minutes." And then I'll have a kid come up and then see if he can solve the problem on the board just as a sample. Then we, I believe in relationships and stuff like that, so I have to take attendance like any teacher, so I will then have an attendance question. And this is actually a way for me to get to know them and them to get to know me. And so the question of the day today, for example was, "What song would be the anthem of your life?" I got a list of a bunch of these questions from my daughter, who's a high school English teacher, and I usually go first to give them an idea, so I said the song from the movie Stand By Me. So that was me. And then those kids would go in and they would share what theirs was. It was always interesting to see any kind. Some questions are just, you know, silly questions, and some are a little deeper. And then they are then say, I will say, Hey, by the end of this week, you need to have gotten through this particular objective, you know. And then

up and coming is this and that. And, like today, for example, we also say, We're tie-dyeing at the end of the week, so make sure you bring your T-shirts in. You know, it's stuff like that, that we will do. And then you then have, we teach in a block schedule, I see my kids every other day. They had, you know, with the beginning stuff, they had 60 minutes to work together, and then five minutes to reflect. And they're all working on slightly different things, but they're clumped together. They clump themselves in little groups. And sometimes I kick them out of a group and put them in another group because they're going to work better in that group. Or sometimes they need to be working with other people because that's they're content-wise on that page. So they become a group, because I make them be a group. I don't know. It varies, you see, but the big ideas are gonna be working individually or in small groups, on what they need to, whatever that is, what's next for them.

**Rena Clark 21:11**

And do you find--a follow-up question because I'm so interested--when students come in initially, maybe they've never been in this type of mastery experience before, does it take a while to get that going? Or do you feel naturally, kids are more inclined to work in those small groups? What's kind of the setup at this like very beginning of the year?

**Jon Bergmann 21:31**

Yeah, good question. It's important that you do set it up, because you have to teach them how you want them to learn. Too many kids are too used to sitting and getting, and there's no sitting and getting. It's, you know, up and doing, I guess is maybe a better way to say it. And so they need to be taught how to do that. So, there's a process where I teach them how to watch a video because particularly a lot of them haven't learned deeply how to watch a video for understanding. Now they know how to watch a Tik Tok video or something like that. That's not the same thing as watching a more, you know, an 8-minute video on a physics concept, where they're specifically expected to take notes and will take notes together for the first week, week and a half. And it'll be much more sort of teacher-directed, but I'm teaching them how to learn in this system. So other things I do to set it up as I send home, actually, the first three videos that they watch are videos about how the class operates. And one video is always a video of last year's students giving them advice. So in the end of May, our school ends in the end of May, so maybe in the middle of May, I will take my cell phone, and I'll say give advice to next year's kids. And then I make a video and I just you know compile the best advice of the students from the previous year. And that really helps them because they're not going to listen to me, the old guy, as much as they will to the kid who's the junior or a senior who's walking around the halls of the school, who they know. So it seems to work.

**Winston Benjamin 22:59**

There's several things that you're saying that it's just like, oh, I'm like, bouncing through thoughts. Like I really love the idea of the reflection being like the formative assessment for the students themselves. I love that like, flipping of that engagement portion. But one of the things that that I see is that it seems like a lot of your moves have been shifting to an online space or a virtual space. So I'm wondering, why? It seems that mastery learning is ideal in a post-pandemic, or a space that is engaging with technology in a different way than in the past?



Do you agree that it's, it's ideal for that? Or what do you think is the context of how valuable is mastery learning in the post-pandemic world?

**Jon Bergmann 23:48**

I think it's like 1,000,000% ideal. This has actually been the topic of some presentations I've been talking about. Because what I'm reading, I'm seeing in my classrooms, and I'm hearing from teachers all over the world as I interact with them, is that there's never been a time where we have had bigger gaps in our classes in terms of where students are at and where they used to be pre-COVID. We had a lot less gaps. And what I mean by gaps is the difference between say your top student and your your small struggling student. And now that gap is bigger. Some students were very successful in pandemic teaching and learning. And some students really, really floundered. And so what I saw especially, I would say last year, I feel like this year our school turned a corner. But the gaps between those levels were so significant. But see, the beauty of a mastery program is that a kid can come in and can get caught up, right, if they're behind. I've had students last year--it didn't happen this semester, this year--but last year, I had three students come from public schools. I teach at private school and public schools who were significantly behind coming in one semester. And, and so I spent some time ascertaining what they knew and didn't know. And I started them, in some cases, on Level Two of 11, because that's all they knew. I can't, you know, start you at Level Six, because you're not ready. Let's start you at Level Two. And let's go. And some students started Level actually two, three, and maybe five, I think, something like that. That is where I was able to start the kids depending on what kind of previous experience they'd had in their other science class.

And did they? Did they do all right in that kind of a flexible classroom?

The one kid completely caught up, actually two kids completely caught up with their peers. And the other one probably got, you know, through 80% of the content. But given where she started, that was a win.

**Winston Benjamin 25:52**

Here's a question. How did the--sometimes I've seen students feel the pressure of not knowing, right? Like, I'm supposed to be on this level. Right? I'm in this class. I'm socially awkward or isolated from others because I'm not. Do you feel that this approach allows for the mitigation of that social hierarchy of knowledge that sometimes happen in schools or in classrooms? If that, if that question makes sense?

**Jon Bergmann 26:22**

Yeah. I mean, there are students who, this is easier than I mean, I teach high school chemistry and physics, you know, some of the harder classes you would have, you know, in high school. But I don't teach the advanced kids. I teach our middle-of-the road kids at our school. And I guess the key thing I'm seeing with my students, is that they, they choose different groups, but they don't think, there's no stigma, I guess. I'm not seeing a stigma between those who are successful, because it's also not always the same students. You know, some students are more successful in Level Two, and some are more successful in Level Three, and it kind of evens out.

Do I have a few students who are totally knocking out of the park? Of course, I do. But there's this ebb and flow between who's in one place and another. Another thing, I don't know if you saw this in the book, but I give different levels of tests. So I've created, in the book, I talked about three levels of tests: a deep test, a clear test, and a basic test. And so students get to, like choose their own adventure. Do you want to choose to take, which test do you feel you're ready for in this unit? This year, I've gone back to two levels of tests. So, tomorrow, when my chemistry kids take their first test, I don't know what percentage will take the deep test versus the clear test. They get two levels of tests. In my physics class, the one I had today, 20% took the deep test, the rest took the clear test. This is a particularly hard unit. And that last, and the way I differentiate between the deep and the clear test, by the way, is that lessons one through five is the clear test. And if you get through lesson six, lesson six is like bonus content, super hard physics problems, then you can go there. So they can, yeah, so it was about 20% took the hard test, and the other 80% took the easier test. And I think that's that's fair. But my guess is some of it'll be maybe flipped in the next unit, which is a lot, I think more accessible.

**Winston Benjamin 28:19**

I appreciate that you give choice.

**Paul Beckermann 28:21**

Yeah, I'm curious what the, I mean, the incentive should be just for the love of learning. But is there an incentive for those kids to go for the deep test to be more challenged?

**Jon Bergmann 28:31**

So my school is very traditional in its grading. And points and percentages and A-B-C-D-Es matter to my students. So, that's the incentive I use. Last semester, I gave those who took the deep test, they could get, they get the score that they get. So they're always out of 100 points. So if they get an 85, they get an 85. But if you take the clear test, the highest you could get is out of 190. And I've now switched that to a 92. So I take an eight point, you take an eight-point hit to take the lesser test. Does that make sense? And they find that eminently fair. It's like, okay, well, I didn't understand that well, and I really want to pass this, and I mean, one of the issues I have found, and the research says something interesting about mastery learning, if you look at all the research from all, all the researchers, I guess, is that mastery learning works best in low- to mid-cognitive ability students. Your high-flying students, it doesn't work as well. And I was on a quest to say I want to solve this problem. And having a conversation with two people when I was writing the book, one, a biology teacher in Ohio, and number two, a Finnish researcher in Finland. And when I put those two together, that's when I realized I could now challenge my most able students. And so now I can have, like this section in this physics, I have never taught it before. And this year, I, you know, created a module around this unit. It's a very difficult concept. And I can now challenge and 20% of the students challenge themselves to go ahead and go for this, this more difficult concept, where before, I would have one test, and students had to score a passing grade, but I couldn't make the test too hard, or not agree, whatever, pass it. So I would shoot for the middle. But now I can differentiate, and I can now challenge the more advanced student. And it's been really fun to see how high I can take those students and their science understanding.

**Winston Benjamin 30:43**

I am hearing something in a conversation that you're having that talks about faith in students' ability, right? Where you, in the past, lowered or said they can't do this, let me make something that they can be successful at. Let me judge ability, right? Like, I feel like you're in your space that you're asking about or talking about is, is a level of teacher trusting students' capacity and will to learn. Is that, is that, is that something that you're like also highlighting? Or am I reaching in that space?

**Jon Bergmann 31:21**

I mean, I always believed that all kids could learn. I mean, maybe this is a better way to say this, Winston. I mean, this is something that I believe fundamentally about the world. It's I don't care when somebody learns it; it's that I care that they learn it. And I think we have an implicit statement in our educational system. And this is the implicit statement. It says if you learn fast, you're smart. And if you are slow, you're dumb. I don't believe that's true. I don't think, I've never met a teacher who says that, who really believes that--well, it's not true; I have met someone who said that's not true. But rarely say that. If they learn that fast, they've got to be super smart. Sometimes people learn slower, and they learn much deeper. But mastery allows that. So I mean, like a kid can take the test again. I'll have students take these tests again, it's like, okay, and do you average your tests? No, I don't average your tests. It's the high score wins. You finally learned it. Congratulations! We're going to celebrate that. I mean, I don't care when, I hear that.

**Winston Benjamin 32:28**

Thank you for that. Thank you for saying that.

**Rena Clark 32:29**

But I still, what I appreciate is because I know something is like, but students have access to rigor. You're not, you're providing more support and I love the idea of like, you had talked about one-on-one, one-on-two, small group, you still have high expectations, but you're giving them that space to learn. But you're not, and I'm going to put air quotes here, like dumbing down the material, because we're still giving students access to that high-level rigorous experience. And I, and I, appreciate that. It's just they need maybe more deeper, rather than wider. So thank you. Yeah.

**Jon Bergmann 33:06**

Now, in a mastery course, I mean, one of the mistakes I made early on, this was this sort of Aaron Sams years. When we were first doing that is that I said, Oh, I can teach so much more this way. This is more of a flipped learning. And I did. But what I realized is I taught at such a frantic pace that the kids were going from thing to thing to thing to thing, and they weren't having time to learn deeper. And I think the deeper thing, yeah, is way better. One of my goals this year in chemistry is to cut, cut, cut content, so that I can get to, there's a project I want to do at the end of the year that connects all the things that they learn. But last year, I ran out of time, and part of it is kids were so behind, COVID, etc. I think I can finally get to them maybe this year,

certainly by next year. But I have to cut things because, yeah, we teach too many things. Our curriculum in the U.S. is too broad and not deep enough, I guess. Yeah, that's how I'd say it.

**Paul Beckermann 34:09**

So I'm curious. How did the kids respond to this? What did what did they tell you? And you know, you've said you interview your your students at the end of the year? What kinds of things do they say?

**Jon Bergmann 34:19**

Now, the first thing they love is that they can take a test again, because... at first they love it. And then they realize they have to then spend extra time with me so that they can retake a test. And so sometimes they like, I've got to do this again. Yeah, you do. And but they really realize that they learn. I guess they find that it's eminently fair. They love the autonomy. I'm trying to get some of the quotes that, I have some of the quotes in the book from students, not just my students, but other students who are using this model around the world and they're basically saying they love that you trust me to learn on my own. Though they don't say it this way, they realize that they're taking ownership of their own learning and you're treating them more like, like, people instead of, you know, cogs in a wheel. I am giving you my my day to day stuff that I do at high school. But this also works at elementary schools. In fact, I highlight Ashhurst primary school in Ashhurst, New Zealand, and they've moved on to a mastery course, and they're a primary school. And they do this with, you know, second graders. So it's not something that's just, you know, the examples we're hearing in this podcast are all my, you know, high school science stuff, because it's just fresh on the mind. But don't feel like this is just, like I said, for high school kids.

**Rena Clark 35:41**

Which kind of kind of leads us right into my next question. So I'm listening, and I'm thinking, oh, I might want to start implementing mastery learning in maybe my classroom. What are some words of advice for teachers that might just be starting that journey?

**Jon Bergmann 35:55**

So even though I teach full time, I have a life outside of this where I actually consult with schools. And so what I do when I work with a school is I try to work with them for two or three years. And I first teach them how to flip their learning. So they can learn how to create the asynchronous content. And this, this is becoming less and less an issue because everybody learned how to do a lot of the stuff during pandemic, right? But then give them a better framework, and then eventually move them like year two to mastery. So make sure they understand how to sort of build a flipped classroom, before they move to a mastery classroom, because then the lift is a lot less difficult, because you've created the independent space objects, which could be readings or videos, or whatever it might be, and then you've got a framework so that you can then eventually move towards a mastery. Then maybe what you do is you say, let's take a particular unit that's given towards mastery, something that tends to be more sequential or skill-based. And then you build this mastery into it. You know, for example, if you're, you know, a middle school English teacher, oftentimes, I mean, first of all, if you're

studying some common book, I'm gonna get another example from high school, but I think the same would apply. My students, you know, taking English, they're reading the book, What They Carried with Them or Left Behind. It's a Vietnam War book, and I'm misquoting the title of the book I'm talking about. You may remember this?

**Paul Beckermann 37:27**

The Things They Carried?

**Jon Bergmann 37:28**

The Things They Carried, that's what it's called. Yeah, yeah, I read it many years ago. My dad's a Vietnam vet. Yep, that's the guy. And I, they were talking about this. And so those English teachers at my school, the key, they want the kids to have all read chapter three, and then they're gonna have a dialogue about what happened and what you know, the key theme is in that chapter, so that's important, okay? And so that's, that's not going to be a great mastery unit. But when you're teaching them writing skills, or you're teaching them I mean, the skill-based piece of a class like an English class, or whatnot, that's the perfect place to have an entry into a mastery unit. So you may not do mastery on that book. But you may do it on the skills that you need to to access that book. Right?

**Paul Beckermann 38:22**

So maybe the literary elements, for instance.

**Jon Bergmann 38:24**

Yes.

**Winston Benjamin 38:25**

Mastery of the skills.

**Paul Beckermann 38:27**

Well, that's kind of perfect for the next segment, Rena. What do you think?

**Rena Clark 38:31**

I was waiting. It looked like Winston, maybe, because he had some deep-looking thoughts. I was actually, and as I was relating this to like some master class and it's like, you know, I don't move on until I'm ready, until I've got something. But we're gonna go into our next section. So Jon, we have our toolkit. So it's time to ask the question like, what's in the toolkit, what's maybe either, it can be an actual tool or something we've taken away and we really want to throw in our bag.

**Transition Music 39:02**

Check it out. Check it out. Check it out. Check it out. What's in the toolkit? What is in the toolkit? So what's in the toolkit? Check it out.

**Rena Clark 39:15**

So Winston, still looks like you're pondering but you had a tool for us.

**Winston Benjamin 39:20**

I do have a tool. I have a tool. It's I think a positionality for teacher, like a way to frame yourself. So earlier, Jon, you said except what you did wrong, and then change them. I think a lot of times teachers get stuck in that motif of like I did wrong, I did wrong. I did wrong. I did wrong. I don't know what to do next. Stop doing that. Like literally that thing we do--stop. So I think having that like take a moment and say what did I do wrong? Reflect on it and then say okay, what can I not do again? I think really is a way to like shift teaching, and shift teachers' understanding of what they can or cannot do.

**Jon Bergmann 40:02**

Yeah reflection is so key. Yeah, right? If you don't reflect on your learning, that student, and what you did wrong, you'll never improve, right? I coach swimming and in coaching, if I'm trying to teach somebody how to do the butterfly, we have to reflect. And sometimes you need a, you know, a coach to say, I see what you can't see that you're doing wrong, so that I can help you fix whatever it is, so that you can be a better butterflyer or whatever.

**Rena Clark 40:31**

And then I'm gonna, I'm gonna go because that kind of fits in. I love this idea of wander around the room. So, move! It's a tool that I think is very much under-utilized in some places, but literally, move around the room and make yourself present in all those different spaces so you can see those things.

**Paul Beckermann 40:51**

I'm going to cheat because I'm going to throw Jon's book in the toolkit, The Mastery Learning Handbook. And Jon, you kind of mentioned to me that you think this is your best book. You want to tell me why?

**Jon Bergmann 41:02**

Everything I believe about education is in that book, more than any other book I've ever written. And I think that the way to teach is mastery learning. I mean, in our story, with Aaron Sams and my story, we started the flip learning thing, but at the end, we started playing around mastery learning. And then you know, the world blew up when that book, you know, however many hundreds of 1,000s of copies sold in all the languages. And then we did the world tour. And we're teaching people how to do flip learning. But I knew in my mind, the best thing we had done in that whole segment was the mastery learning. And I think that's the key. It's, it is, it's the way that we should be teaching. Yeah, it works. It just plain works. And it gets the heart of why you're a teacher, too. If you're listening to this, you're a teacher. Why did you get into teaching? Because you probably love some aspect of content. I loved science, but I also loved kids. And I now get to really get to know my kids. I mean, I sat down today and I just plopped down right next to some kids and we work problems together. But then, you know, we laughed, and I ribbed at this kid who hasn't been doing some work, and I said, now you're like the best athlete in this school. How come you aren't... you know? We were just having fun together. But you know, I

also said to him, that was the you know, he had won, he had scored the winning basket with three seconds to go last Friday night. You know, awesome kid. But I was able to kind of rib him about that. And that's another part of the education part. That it's more art and science. It's more relationship than it is content. I don't know.

**Winston Benjamin 42:41**

Oh, man, you're like, I want to be you when I grow up. Um, so it's time to do our one thing.

**Transition Music 42:51**

It's time for that one thing. One thing. One thing. Time for that one thing. That one thing.

**Winston Benjamin 43:05**

What's the one idea that's still in your mind, that's still running about? I got a bunch. But what's still bouncing in your head that you're gonna walk away thinking about? Rena, what are you thinking? What's your one thing?

**Rena Clark 43:17**

So I was really thinking of so many things swirling around. But this idea of being organized, that goes beyond just organized because a lot of teachers I work with and to be honest, like white supremacist culture, white, middle-class teachers, and they come from like, Type A personalities. And that's why I do it this way, this way, this way. But I like this idea of like flipping organization. Like you love to be organized. You love to be prepared. You love to have a checklist, but maybe we can think about that in a different way. And with mastery learning, being organized, but then it's like flexible organization. So you're organized longer out, but then you're going into it like weaving in and out of that organization. I'm hoping my thoughts are making sense here, because I was really just thinking about, like how we can be more responsive to students. And, you know, shifting things based on the students in front of us and sharing their experiences, but also like having that organization that so many of our teachers crave. And I just see this as a real way to weave it. Yeah.

**Winston Benjamin 44:24**

I like that. Paul, what do you, what are you still processing or things roaming around in your head?

**Paul Beckermann 44:30**

I think the academic benefits are clear, but I feel like the benefits go so much beyond the academics. Students are learning how to be self drivers of their learning. They're becoming independent. I love that you said the students believed that this was eminently fair. And you trust me, you know, it was some of the thoughts that were going through their head and how you even build your attendance and mesh that together with relational capacity building and getting to know your kids. There's just so many benefits that go even beyond the academic, which is important. But those other things are equally important, if not more. So, in the long run, I think.

**Winston Benjamin 45:13**

Paul, I'm going to piggyback off yours. That that was kind of, I was gonna cheat and do two things. The first was like, wow, you build culture in your time. You build space for students' identities and who they are, what they like. The songs, they love, the meaning of their worlds, in your lesson and in your space with them. That gives you the chance to josh and joke with that kid about missing the shot, you know what I mean? Like it builds on that. Right? Exactly like, every you know, what's coming. Right? You know what's coming, and they know that you care. But the the thing that I was going to say is that mastery learning has the space to allow teachers the time to help students fill in their own specific learning gaps, right? Like that's so important. Like, you can do a lot to support so many kids if you know the content enough, to break it enough, to give each student like, hey, you're getting this, let's build you here. Let's build you here. Let's build you here. Where you still get them to the end and still see success. So I really appreciate the like, but space to allow teachers to teach. As you said, why they got into this. Do you have any last one thing that's that's still in your mind, Jon? What are you, what are you thinking?

**Jon Bergmann 46:41**

I guess I would challenge those who are listening that what makes good teaching good is a combination of active learning and relationships. And what mastery gives you the, I think, Winston, you kind of got this. It gives you margin in your actual class period, your day that you have spending with kids, to walk around and help kids. Now what does that mean, help kids? Sometimes it's helping them with a chemistry problem. Sometimes it's something affective, and it's, I mean, I had a girl who's clearly something's wrong. I said, are you okay? And she said, yes, and she was lying. I mean, I could tell. But because I sat down next to her and said, you know, I'm here if you need some help. I mean, she didn't take me up on it. But maybe she will later on, right? Something was going on. It could have just been teenage drama. It could have been something worse, I don't know. But if you have that margin, because you're walking around interacting with kids, that's what I do all. You know, I wear out my shoes. And you know, I don't sit. But I have a standing desk, I don't have a sitting desk. Yeah, it is, it is the best way to teach. And if you talk to people who've done this, they all say I could never go back. And so I would challenge you to consider it, and then try it. And I'll bet you'll say the same thing.

**Paul Beckermann 48:13**

That's awesome. I think we have heard a lot to think about here. In this time we've had with Jon. And Jon, we really appreciate you joining us tonight.

**Jon Bergmann 48:23**

Thanks for having me.

**Paul Beckermann 48:25**

You know, I did hear, you know, we'd hadn't talked a lot about flipped learning because we've kind of moved past that right into mastery learning. But I did hear that people like flip flops, because they're so supportive. In fact, every time you take a step, it's like getting a high five on your foot. So we'd like to extend a huge high five to Jon! That's me working my dad joke in there, however I can. Thanks so much. You take care, Jon.



**Jon Bergmann 48:57**

Nice talking to you guys.

**Rena Clark 49:01**

Thanks for listening to Unpacking Education.

**Winston Benjamin 49:04**

We invite you to visit us at [AvidOpenAccess.org](http://AvidOpenAccess.org) where you can discover resources to support student agency and academic tenacity to create a classroom for future-ready learners.

**Paul Beckermann 49:19**

We'll be back here next Wednesday for a fresh episode of Unpacking Education.

**Rena Clark 49:23**

And remember, go forth and be awesome.

**Winston Benjamin 49:27**

Thank you for all you do.

**Paul Beckermann 49:28**

You make a difference.