

Lee Burgess: Welcome to the Bar Exam Toolbox podcast. Today we're excited to have Gabriel Teninbaum joining us. Gabriel is a law professor and founder of [Spaced Repetition Systems](#). Your Bar Exam Toolbox hosts are Alison Monahan and Lee Burgess, that's me. We're here to demystify the bar exam experience, so you can study effectively, stay sane, and hopefully pass and move on with your life. We're the co-creators of the [Law School Toolbox](#), the [Bar Exam Toolbox](#), and the career-related website [CareerDicta](#). Alison also runs [The Girl's Guide to Law School](#). If you enjoy the show, please leave a review on your favorite listening app, and check out our sister podcast, the [Law School Toolbox podcast](#). If you have any questions, don't hesitate to reach out to us. You can reach us via the [contact form](#) on BarExamToolbox.com, and we'd love to hear from you. And with that, let's get started.

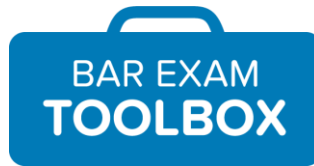
Welcome back. Today we are excited to have Gabriel Teninbaum joining the podcast today to speak about how [spaced repetition](#) can help with your law school and bar exam studies. So, Gabe, thank you so much for meeting me. We're recording this very early, so I am fully caffeinated and ready to talk about memorization.

Gabriel Teninbaum: I have my second cup of coffee too. I'm excited to be here. Thanks, Lee.

Lee Burgess: Great. Well, to start things off, can you share a little bit more about yourself and why you are so passionate about spaced repetition?

Gabriel Teninbaum: Gladly. So, by trade, I'm a law professor. I've been teaching full-time for 17 years and for the last decade or so, I've worked on legal innovation and technology. And I spend a lot of time and energy working on teaching students how to be more efficient and effective – how to do better work, how to do it more quickly, how to help more people. And as I got deeper into the technologies, I said I would like to work on something myself, but because I'm not practicing law, I'd like to find something that can help the community I'm working with, which is law students. So I had read this article on the science of spaced repetition and I learned that this science allows people to learn far more and far more efficiently than any other way to study. And it uses some really cool technology. So, I said, let me try this and see how it helps my students. And it's had just remarkable, remarkable outcomes.

Lee Burgess: So, have you always been kind of interested in... I feel like the word that keeps coming to me is like a biohacking, but it's not biohacking. It's like memorization hacking, learning hacking, I don't know. I feel like there's got to be a... Is there a term that I just don't know, about learning as fast as possible?



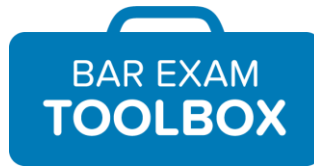
Gabriel Teninbaum: I've always been interested in personal productivity. So, reading David Allen's book [Getting Things Done](#) was a revelation for me, and I wish I had read it when I was in law practice because it helped me sort of organize big projects I was working on. And I've gotten really into other sort of nerdy things that have to do with productivity and self-improvement, like using Venn diagrams and two-by-two matrices, and of course, automation and expert systems and things like that. So, spaced repetition as a technology was a natural extension for me.

Lee Burgess: Very cool. And what do you teach as a law professor?

Gabriel Teninbaum: The two main courses I teach nowadays are a course on using tech tools so that people can be more effective in practice. So, we teach people how to use document assembly tools. An example of a document assembly tool people probably know about is LegalZoom, and I teach law students how to make their own versions of that, as well as other tools like expert systems, which are an automated decision tree that takes the work of an expert and turns it into computer software. And then the other thing that I focus on is thinking about new business models for law. So, in law school, we learn a lot about doing the sort of work that leads to billable hour practice, and I want to teach people about all the other options out there, all the different ways to make a living in the world of private law practice that don't involve billing by the hour. And one of the interesting things that comes part and parcel with that is when you get out of the work of selling your time in exchange for work, you can get more efficient, and that is where the technology always comes into play.

Lee Burgess: Very cool. Well, now I feel like we have to have you back because I want to know more about some of these other things. Awesome. Okay, let's go back to spaced repetition. It is a memorization tool, so why can it make us better exam-takers? Can you kind of explain what the theory is behind it, and then the technology to support it?

Gabriel Teninbaum: Sure. So, let me back way, way up and define what spaced repetition is and just give you a couple of scientific principles that explain why it works. So, spaced repetition is a learning method where people learn and then study again, so that they are looking at information at the exact right moment, the moment before they would otherwise forget it, but not so soon in time that it is easier for them to remember. And this has been something that actually we've known about for over a hundred years, this idea that you should study information and then you should come back at some point later and it will become more and more efficient if you use this sort of schedule to do it. And what has happened



in recent years is that a bunch of technologies have come along, namely the smartphone, the supercomputer we all carry in our pocket that make it really, really easy to figure out the exact right moment to study. So, why does this matter? It matters because when you use this technique, you learn and retain way, way more. So, depending on the person and the context, it's anywhere between two and four times as much information that a person retains, and you actually study far less in terms of total time than when you do cramming. So, that's the underlying science but if I can, let me just say why this matters for law students.

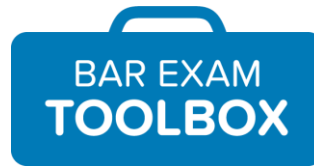
Lee Burgess: Yeah.

Gabriel Teninbaum: So, becoming a great law student and ultimately a person that succeeds on exams and the bar exam takes a whole bunch of meta skills. You have to know the information. So, when you learn black letter Law, what you are doing is you are creating a foundation so that you can do higher-level tasks. So, imagine a world where a professor is standing at the front of the classroom and she wants to do a Socratic dialogue with students, and it involves them knowing the elements of a cause of action and being able to apply them to a fact pattern. Now, if you don't know the elements of a cause of an action, there is zero chance you can appropriately apply them to a fact pattern.

Lee Burgess: Right.

Gabriel Teninbaum: So, this gives you that sort of foundation. It gives you the knowledge and it allows you to retain it in a way that you, in no other way, could do as efficiently. And then what it does is it sets the stage so that you can do higher-level things. So there is this thing in learning called Bloom's Taxonomy. It's sort of a pyramid and at the base of the pyramid is having this basic knowledge. You have to know facts before you can do interesting things with those facts, like apply them.

Lee Burgess: So I'm just thinking about this when I was prepping for this interview, that when we work with students who are struggling in law school and on the bar exam, some people get really obsessed with what we call "legal trivia". They just want to spend all their time studying what would be on a flashcard. It's like, "What are the four elements of this?", etcetera. And so, when I was thinking about spaced repetition, I was saying, okay, this is great because it's going to make it more efficient to memorize that legal trivia. But then what do students do once they have these building blocks? How do you see them translating it into practicing the analysis and what actually needs to be done on the exam, which can include attack plans and really the greater structure of the law?



Gabriel Teninbaum: That's a terrific question, Lee, and thank you for asking it. So, knowing the information inside and out is necessary, but not in itself sufficient to be an expert law student exam-taker or bar taker. Put differently, you have to be able to do something with the knowledge. Now, when I teach students, we use the IRAC model to think about things in a basic way. Others have different ways to think about it. But the idea here is, if you can instantly spot an issue and know what the rule is and regurgitate that perfectly, every single time, you are going to get a whole bunch of extra points. And the other thing is if that comes to mind quickly, you can save a whole bunch of time for doing analysis. So, the idea here is that we want to get the foundational stuff out of the way. We want people to know all the information and be able to recognize the situations where they are going to be asked to regurgitate it. And then we want them to spend their focus on learning analysis really well. And certainly, there's no technology yet that's come along that can teach people analysis by looking at a flashcard, but what we can do is set them up so that they can do good analysis.

Lee Burgess: Absolutely. I think it's going to be tricky to find technology to teach you to write out answers, but I'm sure it's there someday, someday.

Gabriel Teninbaum: It's coming.

Lee Burgess: It's coming, it's coming.

Gabriel Teninbaum: But there's another thing that's worth talking about here. One of the things that all law students struggle with, I struggled with, is when you're new to a topic area, you're new to law school, everything seems a little bit confusing. You don't really have the context so that you can easily get new information and see how it fits within a broader picture. And there's this thing called "schema theory". And the way that schema theory works is basically that once you spot enough trees, you're able to see a forest. And that's the metaphor that's commonly used. This is the world's best tool – and I say that as a scientific truth, it's not an opinion. The world's best tool for populating that forest with trees. So the more effectively you're able to learn this information, the easier you can develop a framework and see when you get new information or new fact patterns, you can recognize how the pieces fit together. So, it supports analysis, but it doesn't itself replace analysis. Put differently, it is a piece of building that larger structure of being able to do analysis.

Lee Burgess: And I could see if I was sitting down to study for, let's say, my first semester finals – because that's what we're talking to everyone about at our work right



now – is if I am saying I have a Crim exam coming up, and I know that if there's a killing of a person, there are a whole lot of possible issues that can come up. I could definitely see the value in sitting down with a flow chart or a blank sheet of paper and saying, "What's my universe? What's the forest?" I know I've got homicide, I've got these four theories for malice, I have voluntary manslaughter, involuntary manslaughter, negligent homicide. I have all of these different options, and then using spaced repetition to kind of fill in the details about all of that, but kind of anchoring myself with the forest. Do you think that that is one way that students could use this technology to kind of start studying?

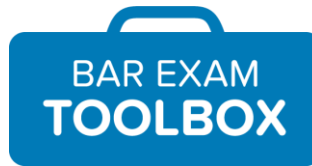
Gabriel Teninbaum: Absolutely. Although frankly, you can do it for both. So, if you wanted to recognize all the different ways that someone can commit a homicide, you could create a flow chart and study that and use a spaced repetition algorithm to remind yourself to do it. And then from there, for each individual cause of action or each different approach, you could memorize the elements. You can also do other things, like identify fact patterns so that you know based on what your professor or what your expert tutor is teaching you, these are the fact patterns that when I see these things happen, I should recognize that this is the kind of answer that the test examiner is looking for. So, you can do all of those things using spaced repetition. The idea here is that if we want people to remember information, to recognize patterns, spaced repetition is just the best way to get it into their head and keep it there for the long term.

Lee Burgess: Okay, so I'm kind of loving this idea, so even a flow chart. Basically I can memorize anything. Doesn't just have to be elements; I can just memorize almost anything.

Gabriel Teninbaum: For sure. And good spaced repetition systems will allow you not just to use text, but to use images, use audio files, use video files. And actually, there's some really, really interesting research about people using spaced repetition to recognize artists who created works of arts.

Lee Burgess: Interesting.

Gabriel Teninbaum: And one of the really interesting things is if you look at 20 different Picasso's, and then are shown a series of photographs, or I should say paintings, that were done by different artists, you become more effectively able to recognize other Picasso's. Your brain can make that extension, and it does it more effectively if you used spaced repetition.



Lee Burgess: Okay, now I'm kind of nerding out with you. I'm liking it. I'm thinking of all the different ways that I can have spaced repetition.

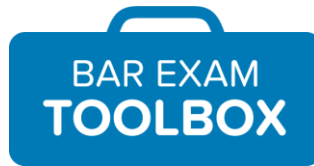
Gabriel Teninbaum: Yeah, well, it's a pattern recognition booster. So, we need to be able to have knowledge, then we need to be able to recognize patterns, and then we need to be able to very quickly be able to respond to what we're saying, what those stimuli are, in the form of an IRAC or some other way, so that we can show the examiner that we know the stuff. So, spaced repetition helps you do all of these things. It helps you know the words that you should write, based on the pattern that you recognize.

Lee Burgess: And does this type of technique of looking at the patterns and the science behind this work for a wide variety of people? For instance, we talk to a lot of students who are kind of second career law students. So they might be coming to law school at a different point in their life than the typical law student who I think the average age is 27-28 or something like that. And we often hear, "I'm just not as good at memorizing anymore." I personally think that's sleep deprivation, that's why I feel that way. But do you find that the science backs that this type of technique works for people at all various points of their lives?

Gabriel Teninbaum: Absolutely, and this has been proven time and again. It actually extends far beyond law students or students in general. There have been research studies on all different sorts of students learning in all different sorts of contexts. And every single one of them, it shows an improvement, whether you're trying to learn a foreign language or learn about medical school things so that you can pass the medical boards, or outside of the context of education. If you want to go to a foreign country and learn their language, if you want to learn about any set of facts, it works. It also works with young children. It works with older people. It works with people with various neurological impairments, because it's been tested as a mechanism to try to get people who might've had a brain injury or something else happen to them to get their memories back and retain them. It's also interestingly been tested with non-human animals. So it's been shown to be effective with primates and actually other mammals and animals from other phyla. So it's pretty broad-based. Interestingly, the only context where it's not been shown to be effective is with repetitive physical tasks. So, if you want to develop, say, a better golf swing or tennis swing using spaced repetition as the way to do it, has shown no positive effect. But every single intellectual context that's ever been measured, again, across human experiences and even non-human experience – if you've got a brain, it's going to help you to think better.



- Lee Burgess: Interesting. Well, I am currently struggling to learn French. And so, now I'm trying to think about how I can work this into my current foreign language struggles. I won't torture you by saying anything in French. And our listeners, they don't want to hear it.
- Gabriel Teninbaum: It's interesting. Spaced repetition is really, really new to law, but it's not new in other contexts. And the most popular foreign language app, Duolingo, is based on spaced repetition. And incidentally, medical students have used the science of spaced repetition for eons, and they use it for cramming all sorts of medical knowledge. "Cramming" is the wrong word. Learning all sorts of medical knowledge and retaining it for the long term, because actually, like with law students, it's not just about learning something for the test and then forgetting it the next day. When you're a medical student, you've got to learn anatomy and keep it in your mind for your career. And so, it's really helpful in that context. But it's new for law students, so that's the thing for us.
- Lee Burgess: It's true, medical students are super intense. When I was in law school, I used to study at the UCSF Medical Center Library, which was close to where I lived in San Francisco while I was in law school. And it was very quiet and it was beautiful. It has this amazing view of downtown San Francisco. So I was like, "Oh, this is the best place." And then periodically, all the medical students would come in and start sleeping in the library during their breaks between things. They would push chairs together. And I spoke to one of them while I was in the restroom or something – I was like, "Why is everybody sleeping in the library?" And she turned to me and was like, "Why wouldn't you sleep in the library?" I was just like, "Wow, this is way harder. You are doing something way harder than I am right now. Okay, good to know."
- Gabriel Teninbaum: Yeah, that's serious business. The goal is to use these tools so that you don't have to sleep in the library.
- Lee Burgess: Right, exactly.
- Gabriel Teninbaum: So you can find some balance.
- Lee Burgess: Right, right. Okay, so the idea is that you are seeing material over and over again in pre-set intervals to move things into your long-term memory. Is that true? Is that basically the idea?
- Gabriel Teninbaum: That's well put. Although one word I'll adjust a little bit, where you say "pre-set". The intervals are based on the feedback that you give the app. In other



words, you rate how well you remember something, and then the schedule adjusts it from there. It's different for each individual. So, if you and I were studying the same information based on how we responded that we knew it, the algorithm would adjust itself appropriately.

Lee Burgess: Got it. Okay, so back in the olden days, before we had apps and systems to run this, people were basically just using flashcards, right? It was the idea that you were... I saw examples where they were talking about you can have multiple boxes of flashcards and kind of move them through, based on how well you're learning the material. Is that a basic but accurate description?

Gabriel Teninbaum: Yes. So, for decades and decades, people have used something called [The Pimsleur Method](#), which as you said, uses physical flashcards – three by five cards, and it has dividers so that you adjust them to different parts of the box, depending on how well you knew something. There are all sorts of challenges with doing it that way, but that was what the technology enabled, so they used it.

Lee Burgess: Okay. So, I was thinking about how you would implement this into your law school study. Many people come from undergrad, like myself – I was a psychology major, I went to a liberal arts college. So, I did write a lot of papers and did a lot of exams, but I was not in the sciences where I think you are kind of trained to memorize huge amounts of information, like my friends who took OChem and things like that. So this can feel very new, I think, to law students – to have to come and start learning these massive amounts of information. So, you can't pull an all-nighter using spaced repetition. I don't think you have enough time to do that. So, when do students start using these tools as they get ready for their exams?

Gabriel Teninbaum: So, the way spaced repetition works is that the longer you've been studying something, the less often you need to look at it. Put differently, the earlier you start, the less work it will be as exams approach. So a pretty typical pattern for someone studying a piece of information using spaced repetition is that you see it the first day on day zero, and then you're shown it again on day one, and then maybe you're shown it again on day three or four. But after that, it's day 10, 11, 12, and after that, it might be day 20, 25, 30. And after that, depending on how you rate it, could be day 60, 70, 80, 90. And then after that, it's maybe day 250 or 300. The idea here is that if as a law student, you incorporate spaced repetition as you learn the content in class, by the time exams come around, you have this information fully committed or very close to fully committed. Where the science is now is that if someone uses this technology and looks at

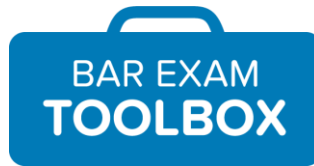


like 10 cards a day, or studies for about 10 minutes a day, they'll retain about 92% of everything they study for as long as they continue to use it for 10 minutes a day. What this means is that if you do your work as it comes along throughout the semester, you learn about a new subject in class, and then you look at the associated cards, when the exam comes around, there's actually not very much studying to do, at least studying in the context of memorizing what the elements are or memorizing what the code says. It's time before the exam to do things like take practice tests and look at old exams and practice your analysis, but it really frees you up at exam time. And then the other bonus is, particularly for first-year law students, those first-year classes are the ones that are tested again on the bar exam. So if you start using this as a 1L – and again, just slow and steady, do your 10 minutes a day and you keep it up throughout law school, adding more content for the classes you take along the way – by the time the bar comes along, you have all of this information banked in ways that makes it so that that summer before the bar exam doesn't have to be nearly so stressful, and you'll have a much better outcome.

Lee Burgess: That makes a lot of sense. I'm not sure if your law school is doing this, but I think there's been a movement towards open book exams, even for these first-year classes, which I'll be honest, I don't personally love, because as you said, this is stuff that you're going to end up having to take on the biggest closed book exam of your career, even though that's changing a little bit maybe in the next few years for many students. I would be curious, do you think that for students who are taking open book exams, that it's still worthwhile to implement some sort of memorization technique while they're studying?

Gabriel Teninbaum: A hundred percent, and there are a couple of reasons. The first reason is because over the course of the semester, by using this technique, you'll learn more throughout the course of the class. In other words, if you know all of the facts, if you know all the information that you're being taught in the class, it gives you more ability during the class itself to focus on the higher level stuff, which will tee you up better for exams. The other thing is when you get to the open book exam, it's not as if you don't still need to identify issues and give elements of positive actions – you still need to write those out. And if those are things that are in your mind and you can identify them quickly, that saves you time to write other things on the exam to create a more organized and succinct answer.

Lee Burgess: Yeah, even if you have a reference document, if you know the material and the better understanding you have of that material, you're going to be able to move much faster than the person who's looking up things all the time. If it's a timed

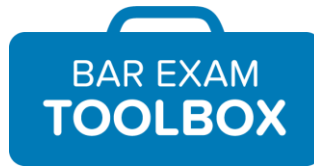


open book exam, you really don't have time to look up everything. If it's a well-written exam, you're going to get punished if you have to look up everything.

Gabriel Teninbaum: That's just right. And Lee, as a point that you made earlier – remember, it's not just facts that you can use this to memorize. Let's say that you're taking an Evidence exam and you say, "Well, it's an open book, but I need to be able to recognize all of the hearsay exceptions that might apply here, because I can see this question is asking me to recognize those exceptions are non-hearsay examples." If you have a mental checklist that allows you to very quickly go through it and see if you missed something, that gives you more of an opportunity to identify issues that you might have just otherwise missed, because one of the problems that can happen on exams is not that you gave a bad answer, it's that you didn't recognize that you should have addressed an issue. So, this helps you spot more issues, as well as address them more appropriately.

Lee Burgess: Yeah. And I think the other piece of this for me that I'm sensing is that if you are diligently kind of putting – we've been saying recently, deposits in the bank, of studying – basically if you do your 10 minutes a day, you're depositing in your study bank throughout the semester. When you get to finals and your reading period, it sounds like it's going to be much more relaxing time. Maybe "relaxing" is the wrong word, but not as intense because you aren't cramming and you are coming at it by saying, "I know most of this law, I'm comfortable with most of this law already. Now I can just focus on the nuances and the application and mastering fact patterns, and practice."

Gabriel Teninbaum: That's just right. I actually like the banking metaphor. And let's add one piece to it – let's imagine that there's interest in a compound. And one of the things that we don't always do intuitively is recognize that, "Hey, if I keep doing this little thing, the impact it makes over time is going to be worth more than the sum of each individual part", the way that compound interest works. And the idea here is that if you do just a little bit of work using this technology, which makes you sort of a super learner, what happens at the end of the semester is you become a super learner. And you've become someone that can prove that more effectively. So, it makes a big difference. The challenge, of course, is that from day to day you just feel like you're doing your work. Just like if you exercise every day and go out and take a walk for half an hour, that's just a walk for half an hour. Fast forward a year and you're in better health. It all added up, it made a big difference. And that's the sort of thing that we're doing.

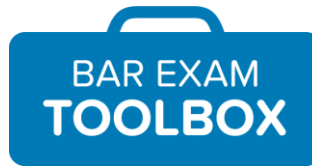


Lee Burgess: Right. Okay, I'm all into this now. Now I'm just thinking of all the things I can memorize using spaced repetition. But now I know it won't help my tennis game. That's okay. That's okay, I can find another... I want to switch to talking a little bit about the bar, because as we have been talking about, the bar exam feels to most people like, and it is, the largest closed book exam that you will take. Most students study for 8 to 10 weeks, two months-ish for the exam. And a lot of the big commercial bar providers still really recommend that you save memorization until the last few weeks of your prep, which I think is kind of a bummer and I think that that's a huge mistake. So, how would you recommend that somebody uses spaced repetition when they're thinking about bar study, especially in this two-month period? And then I also want to expand it, because we have a lot of people who study for longer periods of time, like four-month periods.

Gabriel Teninbaum: Sure. So, the best day to start spaced repetition was yesterday. The second best day is today.

Lee Burgess: Yeah.

Gabriel Teninbaum: And the reason for that is because, as I mentioned a few minutes ago, the science here means that the earlier you start, the lighter the work will be in the future, whether that's a month, two months, three months, four months, a year or three years. That doesn't make a difference. The further out you go in the future, the lighter it will be. So if you start today, that makes the task significantly lighter in three months. And if you start a month from now, it'll still be lighter, but not as light. So the answer is that if you're a law student, you should start doing this as a 1L along with your 1L courses. And you should do 10 cards or 10 minutes a day, whichever comes first, and then you should be done with it. That's it. That's all you're being asked to do. And then you should wake up tomorrow and you should do the exact same thing. If you're a 3L and you're just learning about this, you've got plenty of time. One of the cool things about doing 10 new cards a day is, if you do just a little bit of math, if you do that over the course of a year, even if you skip a few days, we're talking about 3,000 pieces of information that you're going to have committed to memory nearly perfectly – 90 plus percent just by doing 10 minutes of this work a day. And that's mostly stuff that you wouldn't have in mind if you didn't. If it's a student that's graduating or getting ready for the bar, one of the things that we recommend is people play a little bit of money ball. They use their time as wisely as they can. There's roughly two and a half months between graduation and the bar exam at the end of July, but that's a lot of time. That's enough time to memorize 6,000-7,000 cards. So, check this out. The [National Conference of](#)



[Bar Examiners](#), the people that give the MBE/UBE, they publish this outline and they say, "Here are all the things that we reserve the right to test on." But one of the things if you pay attention is, is that a lot of the topics are overweighted. So, for example, Torts is one of the topics that's on the bar exam. And there're five, I think it is, different categories in Torts that they test on, but 50% of the Torts points are about one subcategory – Negligence. So by studying 20% of the content, you can make 50% of the Torts points. So, when you're studying spaced repetition, it's really important not just to think about how much time you give, but if you have relatively limited time to focus on the most important things to spend your 10 cards a day on.

Lee Burgess: Yeah.

Gabriel Teninbaum: The good thing here is that the science says that as long as you have more than a week between the time you start studying and the thing that you're going to be tested on, spaced repetition pays off. It's superior, you retain more, you'll have a better outcome. So for anyone that has at least a week, you should use spaced repetition over other methods, like cramming or traditional study methods.

Lee Burgess: I think that for most law students who are maybe a bit Type A, maybe a bit of perfectionists as a class of people, I think it can be hard to see this long game and to say, "I only need to do 10 minutes a day. Wouldn't it be better if I do 40 minutes a day, or two hours a day?" So, how do you kind of encourage students to take this very methodical approach and not over-study? I would guess over-studying doesn't work because you can only retain so much new information in a day.

Gabriel Teninbaum: Well, that's just right. If you've ever boiled water, if you put the water to boil using medium heat or super-duper high heat, it takes the same amount of time to boil. And the energy that goes, the extra gas power, electric power that goes into making it go on high heat is just wasted energy. And one of the hardest things for people to get their minds around is this idea that sometimes the minimum effective dosage is just as effective as the maximum dosage. And the idea with spaced repetition is, here the minimum effective dose saves you a whole bunch of time and allows you to retain a lot more. So if you want to get the best possible outcome, take that extra time that you saved and rather than look at the flashcards yet another time around, do a practice test, or get an extra night good night's sleep, or do some exercise, or spend some time with people that you care about, allowing you to relax and find the balance in your life. The reality is that if you look at 10 flashcards a day or 100 flashcards a day,

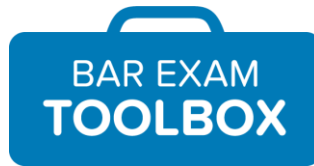


you're going to get about the same outcome, but one of them is going to make you nuts and one of them is going to allow you to have more balance. Let me say one other thing about this. When I built the site spacedrepetition.com, one of the most common pieces of feedback I got – and I user tested it with about a thousand people at a very early stage – was, "I want to study more than 10 cards or 10 minutes a day." And we ultimately built this thing called the "Cram" button. And the "Cram" button is indicated by a steaming coffee mug, like someone wants to get their extra caffeine. And you can hit that button and it allows you to study without the algorithm. But you can't study without a pop-up coming up that says effectively, "We recognize that we're all human. This is not the optimal way to study, but we recognize that you've been enculturated to feel differently about it. You should get off the site, but if you don't want to, go ahead and cram."

Lee Burgess: "If you compulsively need to study, we're here for you."

Gabriel Teninbaum: That's just it. And I've got to admit, I didn't have this technology available to me when I took the bar exam, but if someone had told me a week before the bar exam, "Don't sweat it, just put in half hour a day, you're good. You've been doing your work for three years" – I would have had a really hard time with that. My mindset would have been, "Look, if I'm not going to pass this thing, that's okay, but I'm not going to feel like I didn't go a hundred percent at all moments." But the reality is that this technology allows you to take some of that pressure off and redistribute it to other places. It is a psychological challenge for people to get around, but the numbers bear out – you're better off going slow and steady.

Lee Burgess: Well, and I think this is a cultural problem, around legal education and studying for the bar, is we use the number of hours that we study as some sort of badge of honor, that that means that you are kind of a good and diligent law student. I think this happens in law school, it happens during the bar. I remember my husband, who was not my husband at the time but was living through bar prep with me... He was wise – he waited to see how that went before we committed to each other. But he is not a lawyer. And I came home one day and I was saying... I was very diligent about treating the bar study like a job. I went to campus, I did my commercial course, I stayed until a certain time and then I came home. And I said, "Everybody's staying till midnight, everybody's doing all of these things. Maybe I'm not going to pass." And in all of his wisdom of being outside the world, he's like, "Well, didn't you do well in law school studying the same way?" I was like, "Well, yeah." He's like, "Didn't you even outperform some of these people who are at the library till midnight?" And I was like,



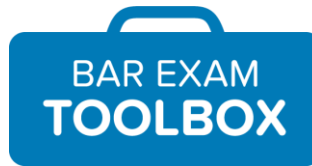
"Yeah." He's like, "Then leave it alone. What is wrong with you?" But I think culturally, as a legal community, we kind of hold up this idea that we're supposed to torture each other, and be tortured, to do good work. I think it goes back to movies and books like [One L](#) and things like that. And I think it's going to be really hard to change our culture, to recognize that 10-20 minutes a day can get you where you need to be. So you can go take your dog for a walk or go have dinner with a friend and still be successful.

Gabriel Teninbaum: You put it so perfectly, and this is a cultural problem. When I teach, one of the things I teach law students about is automation. Can you take this intake interview that you would normally do with someone one-to-one, and you'd have to sit there with a clipboard for an hour and get information, and can you turn that into an app, so that for the clients that would be okay with it, you can have them fill in a form and submit it? And by doing that, you could effectively do an unlimited number of intakes in the time that it would take for you to create just one tool, as opposed to each intake one intake taking an hour. And people have a really, really hard time getting their head around that.

Lee Burgess: Yeah.

Gabriel Teninbaum: The idea that we can do things to work at scale. And in some ways spaced repetition is the same sort of challenge. If you use the right technology, can you take your foot off the gas and go just as fast? Then the answer – again, empirically, this has been proven up and down and it's been written about by the American Psychological Association, the New England Journal of Medicine, the New York Times, the Harvard Business Review, is "Yes". If you're using this technology, you can take your foot off the gas because it's doing something that the way we've been trained to learn doesn't do.

Lee Burgess: So, how do you think if we're trying to combat some of this cultural issue that I think lawyers and law students have, which is you just work hard all the time and that's what you have to be to be successful – you're sitting in your commercial bar course, you're listening to three to four hours of lectures a day. How do you kind of marry that with this idea that I'm going to kind of work smarter, not harder? Is there value in sitting with the three or four-hour lecture a day, or should you instead be doing something else? Or does it depend on your learning style? For me, I sat in three to four-hour lectures, and I am not an auditory learner, so I'm just kind of taking notes and hoping I retain some of it. But that was not a way for me to learn material.



Gabriel Teninbaum: Right. So, I wouldn't recommend skipping out of the box bar review course in favor of just using spaced repetition. And the reason for that is because there's more to success on the bar exam than knowing the facts and recognizing the pattern. My own experience with a big box bar course was actually somewhat different than yours, Lee, and it might go to the way I learn or something else. I thought it was really nice to have someone take three years of law school, at least the bar tested portion, and condense them effectively into an outline form. Now there are all sorts of problems I see with big box bar exams and all sorts of limitations. But for me, having someone that I felt understood this entire process, condensed this thing and say, "Remember this class you took, Torts, three years ago or two years ago, whatever it was – remember you spent a year on that sweating it? In four hours, we're going to help you understand everything you need to know on the bar exam." And to put that sort of framing around it, I thought that was pretty useful. What I thought was more useful was spending time practicing that black letter law in context, whether that was doing practice questions or doing practice essays and getting feedback for it. And this is where spaced repetition comes in. There're invariably going to be portions of these courses that you need to remind yourself about. There might be entire classes you didn't take that are bar tested. I have a lot of classmates that didn't take Corporations, or Business Entity Fundamentals, I guess we call it now, in preparation for the bar exam. My state required that, so everyone had to go back and learn. I even had a couple of classmates – I can't imagine why they were allowed to do this – they graduated without taking Evidence, and they had to go and learn it. So, these things are things that spaced repetition can be enormously helpful on. But I would say that it's not, at this point at least, a replacement for bar exam courses. It's a supplement to bar exam courses.

Lee Burgess: Yeah. Well, and I think maybe it frees the student up a little bit to just say, "I'm going to sit in this three-hour lecture and not assume I'm going to memorize it." I think that there is this idea of what can you get from this three-hour lecture. And so, like you were saying, you can kind of get context, you can see how it can be condensed down. I think you do see the forest. Somebody is basically saying, "Here's the three-hour forest." And then you can use spaced repetition to populate that forest. But I think for a lot of bar studiers, they show up to that three-hour lecture and they think they're supposed to be retaining the information in that lecture. And I think that that's a lot to ask for a lot of people in the way that they learn. So, if you have a plan outside of that to say, "Well, this is now how I memorize the law that was covered in that lecture" – then I think it just really frees you up to use that lecture for maybe what it's good for for you, based on your learning style and how your brain works and all of that.



Gabriel Teninbaum: Well put.

Lee Burgess: Alright. So, now I know that I need to use spaced repetition in my French studies, for my kids, not my tennis game. So I'm learning. I'm learning. So, with your spaced repetition website, if students are really curious about how to implement it, either in their law school or bar study, how do they learn more? How do they use it? What should students do to kind of get engaged?

Gabriel Teninbaum: Well, the website is spacedrepetition.com. And when people go on the website, they can learn about what the site is and how it works. They can get a free trial so that they can see how it works for them. It's set up so that it works for every student, whether they have a PC or a Mac or they're using it on a smartphone. Any web enabled device will allow people to give it a try. And the idea is that you should come on the site, you should study for 10 minutes, and you should study for 10 minutes every day for whatever topic is important to you. So, we have content for 1Ls, content that has been created by professionals for all of the first-year topics. The [Emanuel Law in a Flash](#) collection, which if you're new to law school, you might not know about. Lee and I know about it. People that have gone to law school for the last 30-40 years have studied these physical flashcards that come in sort of these Trivial Pursuit boxes. I'm dating myself, I don't know if people play Trivial Pursuit. But they're flashcard boxes that go subject by subject. That entire library is now on spacedrepetition.com, the people from Aspen placed it there. So, if a student is taking a given 1L class and they want to study one of the topics using the spacedrepetition.com website, they can surf on in and they can buy the Aspen Law in a Flash, or Criminal Law, or Con Law, or Civ Pro or whatever it is that they want to take. They can also buy a first-year bundle that covers all the first-year classes that people take. Beyond that, we have other features. We have this thing called the "Create and Share plan" that allows people to do just what it sounds like – to create as many flashcards as they want on their own, and to study them on their own or with others. So, let's say that you're a law student and you have a study group, and you want to create things collaboratively so that you can all get ready for an exam with your classmates. You can all get on, you can share a deck of cards, you can set it up so that you can all add content or you can individually create content, and you can show each other what you're doing. And the idea here is that it's good to learn the sort of basic baseline content that something like the Emanuel Law in a Flash collection has. But the other thing is that law professors teach things with their own spin. So someone might say, "Look, I teach Con Law, but I teach it from a critical race theory perspective" or, "I teach it from a law and economics perspective." So you might want to have supplemental flashcards that address that professor's own interests, or your own interests.



And then the other thing that we have available on the site is this thing called the "Boost Deck". And that's for people that are in the final stages of law school and getting ready for the bar exam. And that's the one that we play money ball with at 642 cards, I think it is. And that is the one that people who are just getting ready for the bar exam can do and get maximum benefit by getting prepared to be tested on the things that are overweighted on the bar exam. A lot of students actually buy that deck after their first year if they felt like they struggled with first-year topics, and they want to make sure that they really understand that stuff deeply. So, those are the pieces that we have available on the site. But the other things that I should say is that once you have access to the site, you can use it for whatever you want. So I've had students who have used it to learn foreign languages, I had someone who was actually going to visit a grandmother far off and the grandmother spoke a dialect of a language that she didn't know very well, so she wanted to learn vocabulary. I had a student from California who wanted to become a master wine sommelier load up a bunch of cards for that. I've had a lot of people who graduated and kept it so that, as a rookie lawyer or DA, they could learn all sorts of interesting things that were relevant to their legal work, because really, spaced repetition as I've built it is for law students, but the technology itself is subject matter agnostic. So, if there's any challenge people want to learn for and retain information for, it's there for them.

Lee Burgess: Well, that's amazing. I love this idea. I don't know, now I feel like I have to build a French deck. I feel like I have a new project 10 minutes a day.

Gabriel Teninbaum: You should do it.

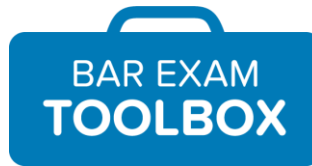
Lee Burgess: I'm going to do it. I'm going to do it.

Gabriel Teninbaum: We support audio files too. So you could even load up some French and make sure that you understand what the words say.

Lee Burgess: Oh, okay. Alright, you've won me over. You've absolutely won me over. My law career as memorizing massive amounts of information is done, so now I have to take on new topics. I love it.

Gabriel Teninbaum: Perfect.

Lee Burgess: Well, this sounds really accessible to law students and bar takers. So, thank you very much for sharing your wisdom. I do encourage everyone to check out your



site and at least try it out, because it seems like if you're just doing 10 minutes a day, in a few weeks you should be able to see whether this is really working for you.

Gabriel Teninbaum: That's exactly it. The dividends start getting paid very early on and they get bigger over time. So if people give it a try, I think they'll like it.

Lee Burgess: Awesome. Well, thank you so much for taking time out of your busy schedule to chat with us today. I hope you'll come back and we can talk about all the other interesting stuff that you work on. I kept a whole list next to me. So, we look forward to having you back on the podcast, and thanks again for taking the time.

Gabriel Teninbaum: You're welcome, Lee. Thank you so much for having me. It was a real pleasure.

Lee Burgess: Okay, great. Are you interested in checking out spacedrepetition.com for yourself? If so, you can use the coupon code TOOLBOX15 in all caps for 15% off any product. Once again, the promo code is T-O-O-L-B-O-X-1-5 with all capital letters. If you use the product and enjoy it, we would love to hear about it. And with that, we're out of time. If you enjoyed this episode of the Bar Exam Toolbox podcast, please take a second to leave a review and rating on your favorite listening app. We'd really appreciate it. And be sure to subscribe so you don't miss anything. If you have any questions or comments, please don't hesitate to reach out to Lee or Alison at lee@barexamtoolbox.com or alison@barexamtoolbox.com. Or you can always contact us via our website [contact form](https://www.barexamtoolbox.com/contact-form) at BarExamToolbox.com. Thanks for listening, and we'll talk soon!

RESOURCES:

[Spaced Repetition Systems, LLC](#)

[NCBE – National Conference of Bar Examiners](#)

[Emanuel Law in a Flash](#)

[The Pimsleur Method](#)

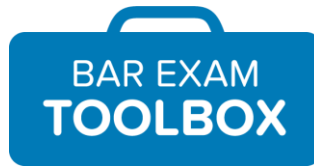
[How Spaced Repetition Can Help You as a Law Student – Part 1](#)

[How Spaced Repetition Can Help You as a Law Student – Part 2](#)

[The Complete Guide to Memorization in Law School](#)

[Getting Things Done: The Art of Stress-Free Productivity, by David Allen](#)

[One L: The Turbulent True Story of a First Year at Harvard Law School, by Scott Turow](#)



[Podcast Episode 191: Quick Tips – Using Spaced Repetition to Memorize](#)